YAMATO AND MUSASHI INTERNET PHOTO ARCHIVE

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Photos were imported into this Desktop Archive in the fullest resolution available.
Use the "Zoom" feature to see greater detail (some are 5000+ pixels wide).

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PREFACE

First a few words about how this Archive came to be.

I am a former US military officer with a life-long interest in history. My father was a WW2 hero who fought the Axis in occupied Europe for 3 long years. He was a History professor and linguist before the war. When I was a small boy, he regaled me with stories of Alexander's conquests, of Pyramids and Pharaohs, of Hannibal's Roman Campaign, of Demosthenes devising a unique way to cure his stutter (you can look it up), and of his own wartime close calls. His stories fired my childhood imagination and imbued me with a love of history.

I became fascinated by the War in the Pacific – carrier fleets fighting each other without ever sighting an enemy ship, as my father had told me. It seemed so exotic compared to the slog of WW2 ground operations he had been engaged in.

In time I got a BA degree in history, graduating Phi Beta Kappa, and then obtained a Juris Doctor Degree from Northwestern University School of Law in Chicago, prior to being commissioned into the U.S. military.

I had several notable "out of AFSC" assignments during my time in uniform: first as a USAF liaison officer with the three presidential delegations at the Dayton Peace Talks (1995), then a year spent in Bosnia (1996) as the official interpreter for the Commanding General of Task Force Eagle, MG William L. Nash, during Operation Joint Endeavor. Both missions bore remarkable similarity to those carried out by my father during WW2.

Upon my return to civilian life, I took up hobby modeling as a way to relax and give my creative side an outlet.

From 2007-2009, I spent hundreds of hours building a customized 1/200 scale model of Yamato. Refitting that old kit to reflect Yamato's 1945 deck configuration required scratch building many additional gun turrets, fire control directors, and updating parts of her superstructure. And that required research - a lot of research.

I found so many rare photos during that research that I decided to create an Internet Photo Archive of Battleship Yamato and her sister ship Battleship Musashi. It was a labor of love with the goal of helping to make archival resources more widely available. It wound up becoming more all-consuming than I had ever planned, bringing me into contact with professional and amateur historians whose input proved invaluable to this project over the next two decades. Their contributions will be acknowledged in the next section.

The archive was online from August 2008 until June 2025. Then, without warning, the hosting Tripod servers went down for good one day, taking the archive with them.

Unwilling to consign 18 years of work on this project to the "dustbin of history", I resolved to make it available in expanded desktop format for easy download and addition to your personal digital libraries.

This is the product of that resolve. Happy Independence Day!

July 4th, 2025
Vlad Petnicki
Editor

ACKNOWLEDGEMENTS

I would like to gratefully acknowledge many who have selflessly given of their time to give me advice, engage me in discussions, and provide additional photographs and other materials that I would never have otherwise been able to include in this Archive. This is not a complete list, but it is a start.

ROBERT LUNDGREN – who provided me with invaluable historical perspective, suggestions and voluminous original Japanese and US archive information and materials he collected during his own 10-year research that culminated in the definitive account of the Battle Off Samar Island, "The World Wond'rd" (2014). His book re-wrote the previously incomplete American understanding of the order of that battle, as well as the key role (from the Japanese perspective) that Battleship Yamato played in that engagement. When I told him about this Desktop project, he sent me a lengthy recent article he wrote covering the Battle of Leyte Gulf, allowing me to add additional photographs and a wealth of new information to this final edition. Robert was also incredibly kind to ask me to be a "sounding board" as he wrote his book on Samar, sending me draft sections to read and comment on during the 5 years prior to its publication. I hope that my encouragement and any stylistic suggestions I made were useful to him.

ANTHONY TULLY – co-author of the definitive account of the Battle of Midway, "Shattered Sword", who likewise willingly gave of his time to this amateur historian, filling in many gaps in my knowledge and making useful suggestions that have helped me to make this Archive more accurate and informative than it otherwise would have been. At the 11th hour in the creation of this Desktop Archive, Anthony gave me a lengthy recent article he wrote on Operation Ten-ichigo, with a score of new combat photos and commentary, identifying for me numerous IJN destroyers seen in the USN photos of the attack on the Yamato Task Force. Like Robert's recent article on Leyte, Anthony's thoroughly researched piece has greatly enriched the final edition of this project - as has the wealth of other information on these two ships that he recently sent along to me.

CHRISTIAN VAN DER SANDEN – whose encouragement and additional materials motivated me to complete the last major update to the old Archive website in 2024. For this Desktop Edition he has sent me dozens of new photos, charts, and diagrams that he prepared based on his own decades-long study of these two ships. He additionally identified the dates, places, ships and significance of many other Archive photos.

DOUG HALLET, MATTHEW JONES, JIM BAUMANN, DAN K, 'BASEBALLBRAT', 'TIMMY C' – and many other members of the ModelWarships.com Forum and the now-defunct SteelNavy.com website, who provided encouragement and new materials for the Archive over the years.

ED LOW – Admin of the FB "Imperial Japanese Navy Page", who provided several photos and much valuable insight and historical information.

Last but not least, thanks are due to the anonymous legion of Japanese researchers who, starting in the 1980s, pored over various US Pacific War archives, unearthing obscure combat photos and painstakingly identifying the IJN ships involved.

Dedicated to my father – the best man I ever knew.

ONLINE RESOURCES AND LINKS

HISTORICAL LINKS:

YAMATO CLASS GENESIS: https://warshipprojects.com/2018/04/24/the-yamato-class-genesis/

IJN IN COLOR WEBSITE BY IROOTOKO_JR: https://blog.livedoor.jp/irootoko_jr/

CLASSICWARSHIPS.COM: https://www.facebook.com/ClassicWarships/

IJN YAMATO - TABULAR RECORD OF MOVEMENT: http://www.combinedfleet.com/yamato.htm

THE ROBERT LUNDGREN HISTORICAL RESOURCE: http://www.navweaps.com/index_lundgren/index_lundgren.php

IMPERIAL JAPANESE NAVY PAGE (COMBINED FLEET): http://www.combinedfleet.com/

YAMATO'S FINAL BATTLE & YAMATO AT LEYTE GULF - HISTORICAL CGI FILMS BY FUTABASHA:
https://www.youtube.com/channel/UC4L3K_U1_vUHmWoDtUKFDgA/videos

FORUMS:

MODEL WARSHIPS.COM: http://www.shipmodels.info/mws_forum/index.php

TULLY'S PORT: https:/propnturret.com/tully/
(Forum run by Historian Anthony Tully, co-author of "Shattered Sword - The Untold Story of The Battle of Midway")

FB IMPERIAL JAPANESE NAVY PAGE: https:/www.facebook.com/groups/1523645204325116

4 INDISPENSABLE BOOKS FOR ANY YAMATO ENTHUSIAST:

Robert Lundgren – **"The World Wond'rd"** – The definitive analysis of the Battle off Samar Island during Leyte Gulf in 1944, and the significant role Battleship Yamato played. A " Must Read" for any Pacific War/IJN history buff:
https://www.amazon.com/gp/product/160888046X/sr=1-1/qid=1401990301/ref=olp_product_details?ie=UTF8&me=&qid=1401990301&sr=1-1

Janusz Skulski –"**Battleships Yamato and Musashi – (Anatomy of a Ship)":**
https://www.amazon.com/Battleships-Yamato-Musashi-Anatomy-Ship/dp/1844863174/ref=asap_bc?ie=UTF8

Russell Spurr -"**A Glorious Way to Die - The Kamikaze Mission of the Battleship Yamato**":
https://www.amazon.com/s/ref=nb_ss_b?url=flatten%3D1%26search-alias%3Dstripbooks%26node%3D1000&field-keywords=spurr+yamato&x=0&y=0

Yoshida Mitsuru -"**Requiem for Battleship Yamato**" (A gripping survivor's account of her last battle.)
https://www.amazon.com/Requiem-Battleship-Yamato-Bluejacket-Books/dp/1557505446/ref=sr_1_1?ie=UTF8&s=books&qid=1231821861&sr=1-1

BATTLESHIP YAMATO MERCHANDISE:

GET YAMATO T- SHIRTS, POSTERS, MUGS, CAPS, DRINK COASTERS AT THE YAMATO ZAZZLE STORE:
https://www.zazzle.com/yoshidas

1: "Yamato was a singularly beautiful ship, with a graceful sheer to her flush deck, unbroken from stem to stern, and a streamlined mast and stack" – Samuel Eliot Morison, History of US Naval Operations in WW2, Vol. 14, pp. 202.

A FEW THOUGHTS ON YAMATO - PART I:

Yamato only saw battle a handful of times during the entire Second World War. She was torpedoed by the submarine USS Skate in 1943, participated in the Battle of Leyte Gulf in 1944, was unsuccessfully bombed in March 1945 and finally fought and was sunk in the Battle for Okinawa in April 1945, where the pointless sacrifice of this ship and her crew cemented her place in the historical annals of doomed warriors.

Robert Lundgren's book on the Battle off Samar Island during the Battle of Leyte Gulf showed that Yamato's performance at the Battle off Samar Island on 10/25/1944 exceeded expectations.

She sank one escort carrier (Gambier Bay) with an 18" shell to the engine room, hit and sunk destroyer USS Johnston with a three-shell 18" broadside and an almost simultaneous three-shell 6" broadside, sank the destroyer USS Hoel with her 6" secondary batteries, and crippled escort carrier White Plains with the longest shot in naval history (19.65 miles).

Tantalizing evidence that, in a world without the dominant aircraft carrier, she may well have been the ultimate naval standoff weapon that she was originally designed to be.

The Battle of Leyte Gulf is described in further detail later on, under accompanying photos.

None-the-less, Yamato and Musashi were strategically obsolete the day each was launched. A mere week and a half before Yamato's launch in December 1941, the Japanese had demonstrated the vulnerability of capital ships to carrier based air power at Pearl Harbor.

And yet.

Despite going down in just over 2 hours of bombardment by US Navy planes off Okinawa on April 7th, 1945, this gigantic ship still captivates the imagination.

The story of Yamato's final mission is remembered in Japan in much the same way that Texans remembered the Battle of the Alamo.

As a Japanese historian once noted: *"Once you learn the story of the Yamato, it becomes an obsession."*

Yamato's mystique still resonates because her story touches on some of the most admired traits in human character - traits that cut across the ages, and across cultures.

Honor. Courage. Selflessness. Sacrifice.

More than two millennia ago, King Leonidas and his Spartans fell to a man blocking the pass of Thermopylae long enough for the Greek armies to escape from the Persian onslaught. In ancient times, a tablet was erected there reading:

"Go tell the Spartans, stranger passing by, that here, obedient to their laws, we lie."

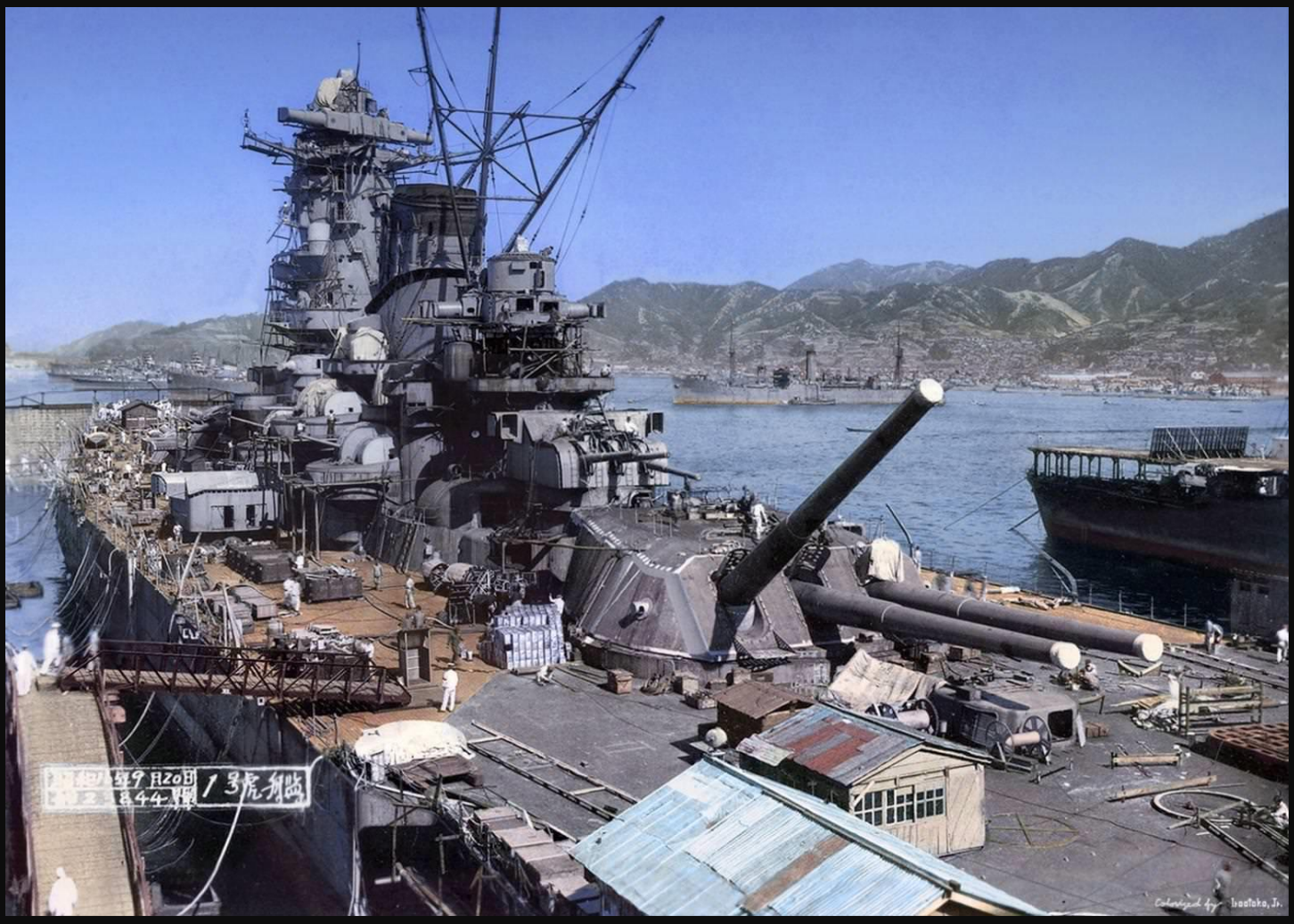
The Jewish defenders of Masada, who held out for over a year against the Roman armies of Titus nearly two thousand years ago before dying to a man, are also remembered to this day for their heroism.

Likewise the defenders of the Alamo who fell during the Texian Revolution against Mexico.

In historical terms, willingly sacrificing your life for your country – when there is no hope of victory, nor even of personal survival - is to earn for yourself what Theodore Roosevelt once dubbed *"Deathless Fame."*

So it was with the Men of Yamato - whose actions earned for themselves, and for their ship, the same *"Deathless Fame"* that the defenders of Thermopylae, Masada, and the Alamo had earned before them.

Colorized photo courtesy of Irootoko Jr. I flipped the original photo, adding the flag and the traditional Japanese symbols for her name.



2. Yamato's Construction, 1941
A remarkable photo from 1941 shows myriad details of the Yamato's rear aircraft deck, side 6-inch guns that were replaced by AA guns later in the war, as well as the aft superstructure and main turret #3.

Christian van der Sanden provides more information about this photo: *"September 20, 1941 - Kure Naval Arsenal with aircraft carrier Hosho on the right side."*

Make sure you zoom in on this image. This is a high resolution photo. Colorized photo courtesy of Irootoko Jr.

A FEW THOUGHTS ON YAMATO - PART II:

To understand the mystique of the Yamato, you must first learn a few little known facts about the significance of this great ship. Yes, many people know that she was the largest battleship ever constructed - 73,000 tons fully loaded, 25,000 tons of which was armor plating. She was 40 percent larger than the US Iowa Class battleships. She boasted the biggest guns ever mounted on a ship - nine 18.1" guns mounted in three enormous turrets, two forward, one aft. Each turret weighed 3000 tons, or more than the average WW2 destroyer.

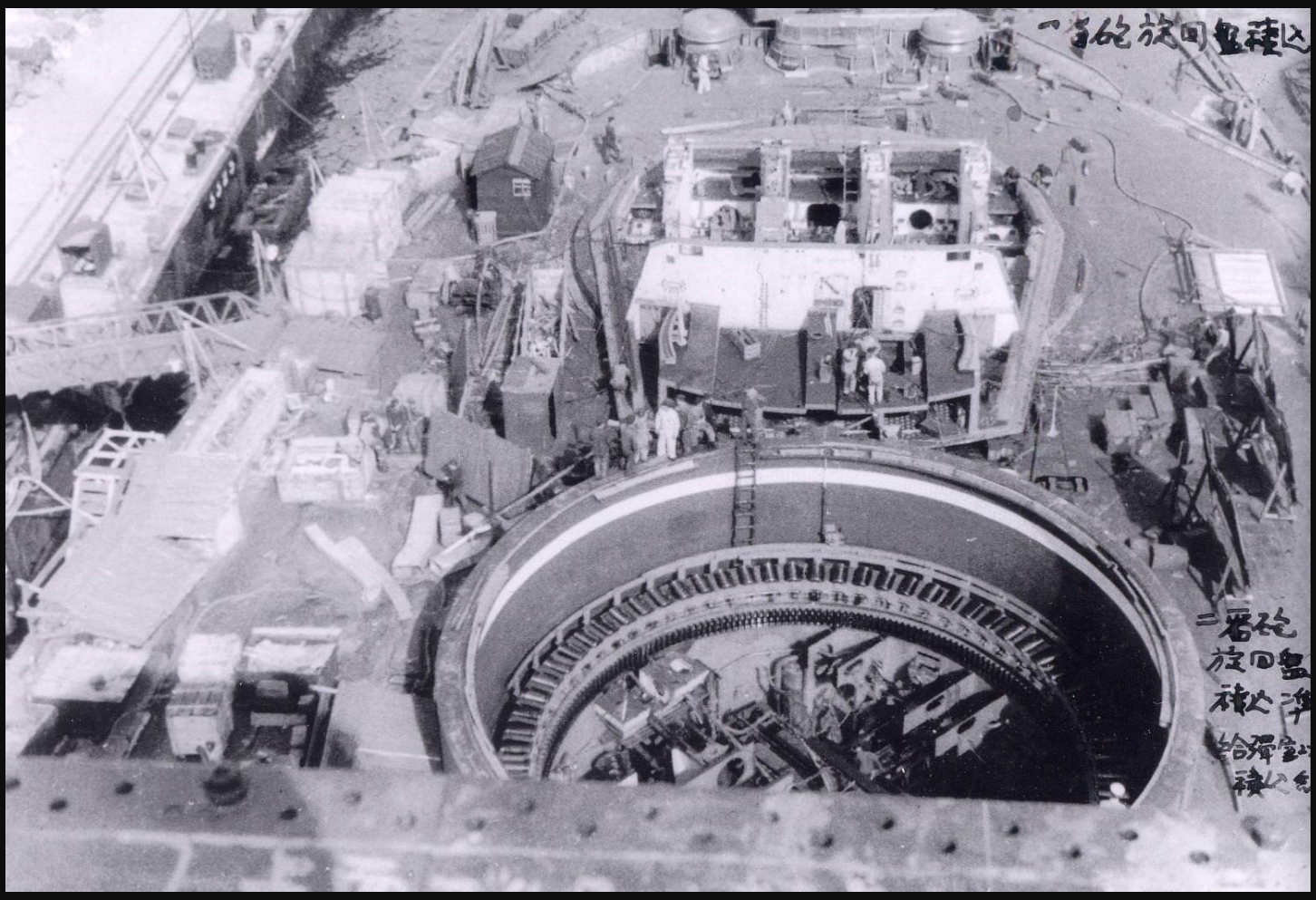
In addition, she boasted six 6" secondary guns (which would have been the main battery on many WW2 cruisers), twenty-four 5" anti-aircraft guns, and, by April 1945, an incredible total of 52 three-barrel .25mm anti-aircraft machine guns, 8 single barrel mounts of .25mm anti-aircraft machine guns, and an additional 2 mounts of two-barreled 13 mm 'pea-shooters' located about halfway up the main tower of the front superstructure.

Yet all of this armament was virtually useless in the face of a 400-plane assault by the US Navy.

So why the Japanese national obsession with the Yamato (to say nothing of the interest the ship generates in the rest of the world)? Well, this is where it gets interesting.

As Richard H. Minear pointed out in his translator's introduction to Yoshida Mitsuru's classic "Requiem for Battleship Yamato":

"Yamato's mystique was especially strong, in part because Yamato is the poetic name for Japan...Long before the twentieth century the term Yamato evoked among Japanese the emotions captured for Americans in such phrases as 'America the Beautiful' and 'Columbia, the gem of the ocean.'..But battleship Yamato served also as a metaphor: the end of the battleship Yamato, the end of the Japanese empire."



3. Yamato's Construction
Workers are gathered around the gaping opening that will house main turret #2.
Note main turret #1 in front of the opening - farther along in construction, the base of the actual turret is mounted and the openings where the 18.1" rifles (guns) will be mounted can be seen.

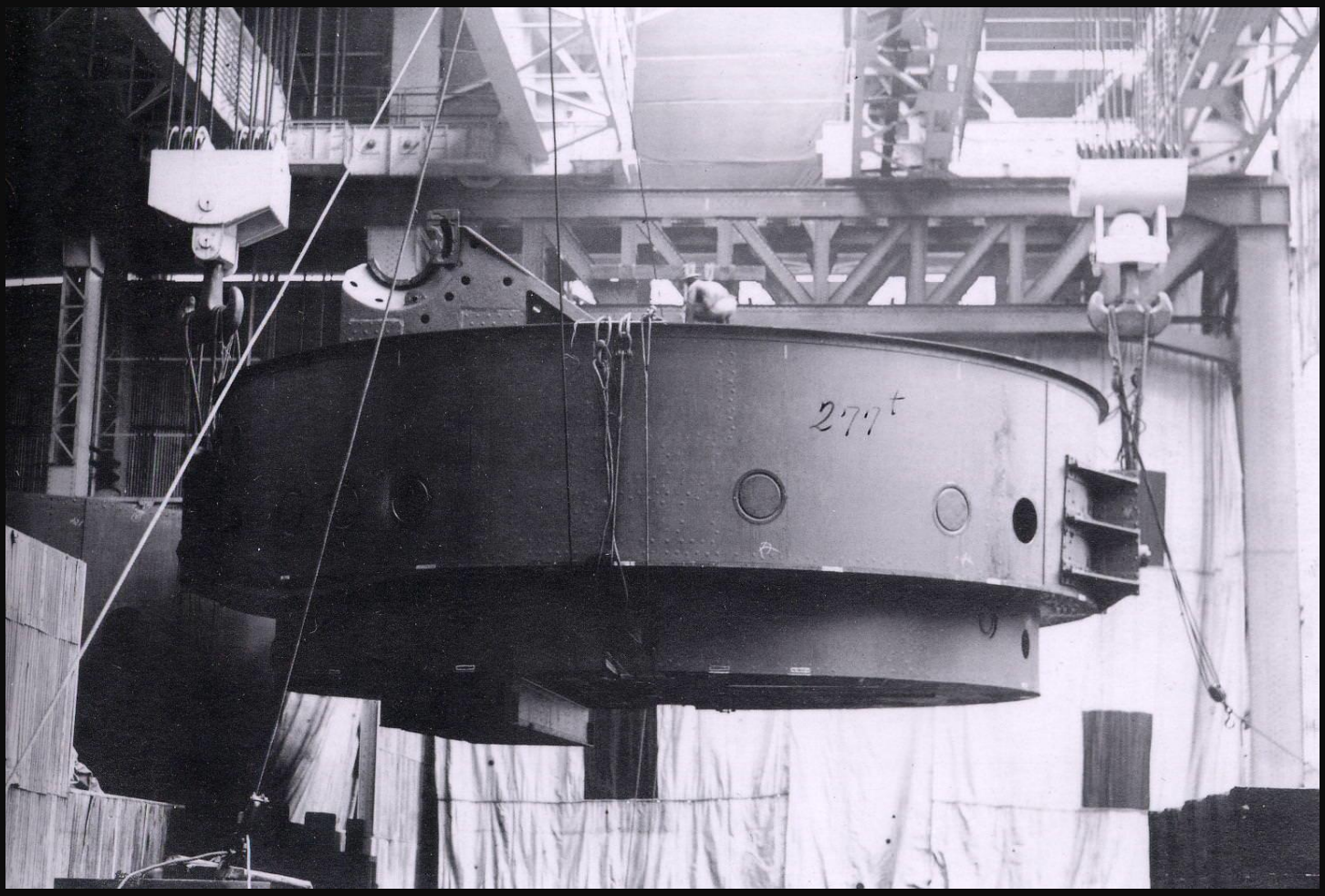
Christian van der Sanden provides more information about this photo*: "June 3, 1940".*

A FEW THOUGHTS ON YAMATO, PART III:

For many of the most poignant never-before-seen photos of Yamato during her final battle, I quoted liberally from Yoshida Mitsuru's poetic memoir "Requiem for Battleship Yamato". Be forewarned that some of Yoshida's descriptions

of the battle are graphic and disturbing. War is not pretty, and men of real flesh and blood are at the receiving end of bullets, bombs, shells and torpedoes. Yoshida's incredible account is also a minor philosophical treatise on the futility and waste of war, and would be worth reading just from that standpoint. But his moment-by-moment recollection of those 2 hours of Hell aboard Yamato created one of the most gripping first-hand accounts of the Pacific War.

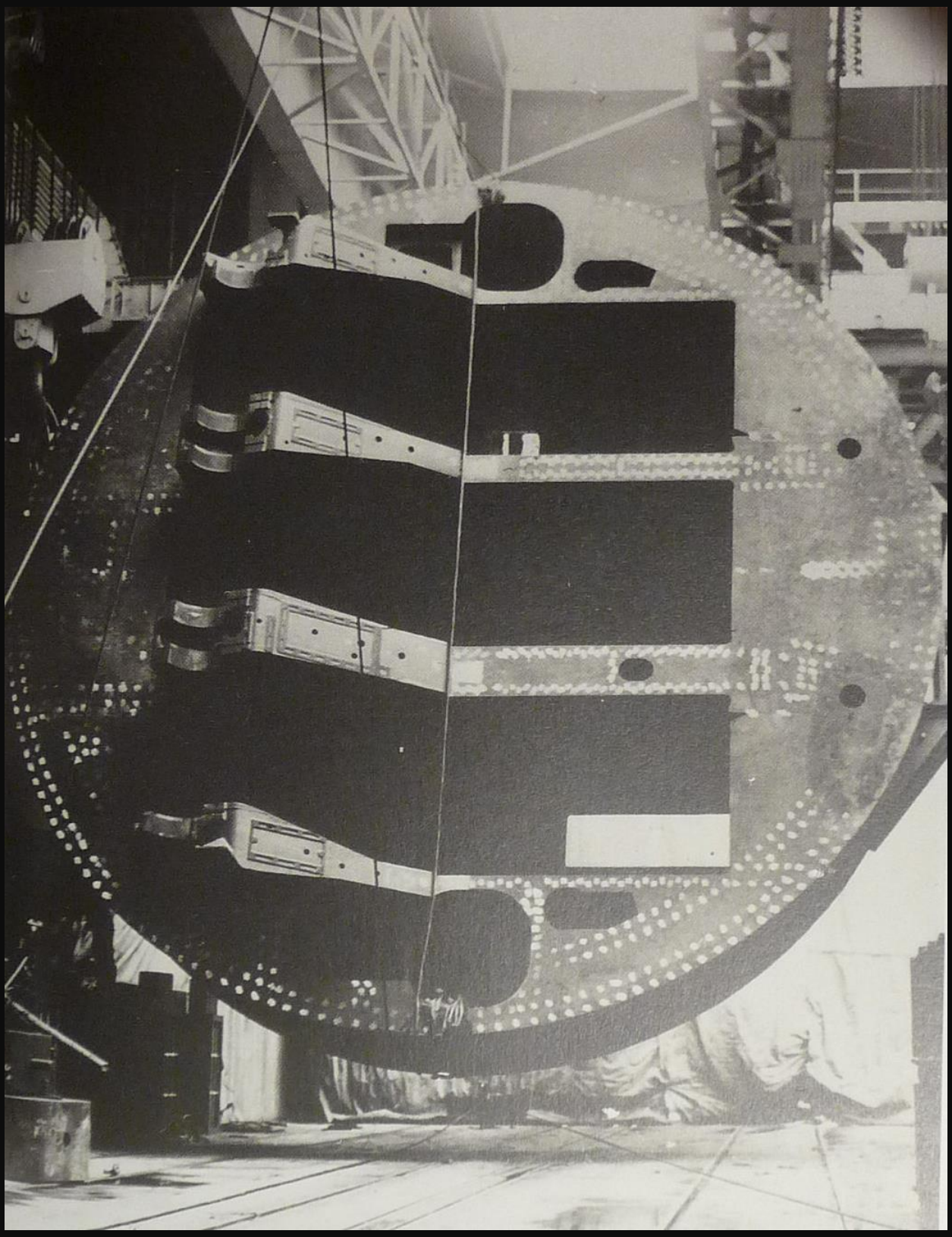
Yoshida was a 22-year-old ensign who happened to spend most of the final battle on Yamato's bridge, surrounded by Captains and Admirals, surviving dozens of brushes with death. His book is one of the works that are a must for anyone wishing to learn more about this great ship (See the Resources Page).



4. Construction of Yamato

A worker squats atop the suspended barbette of one of Yamato's 18.1" guns.

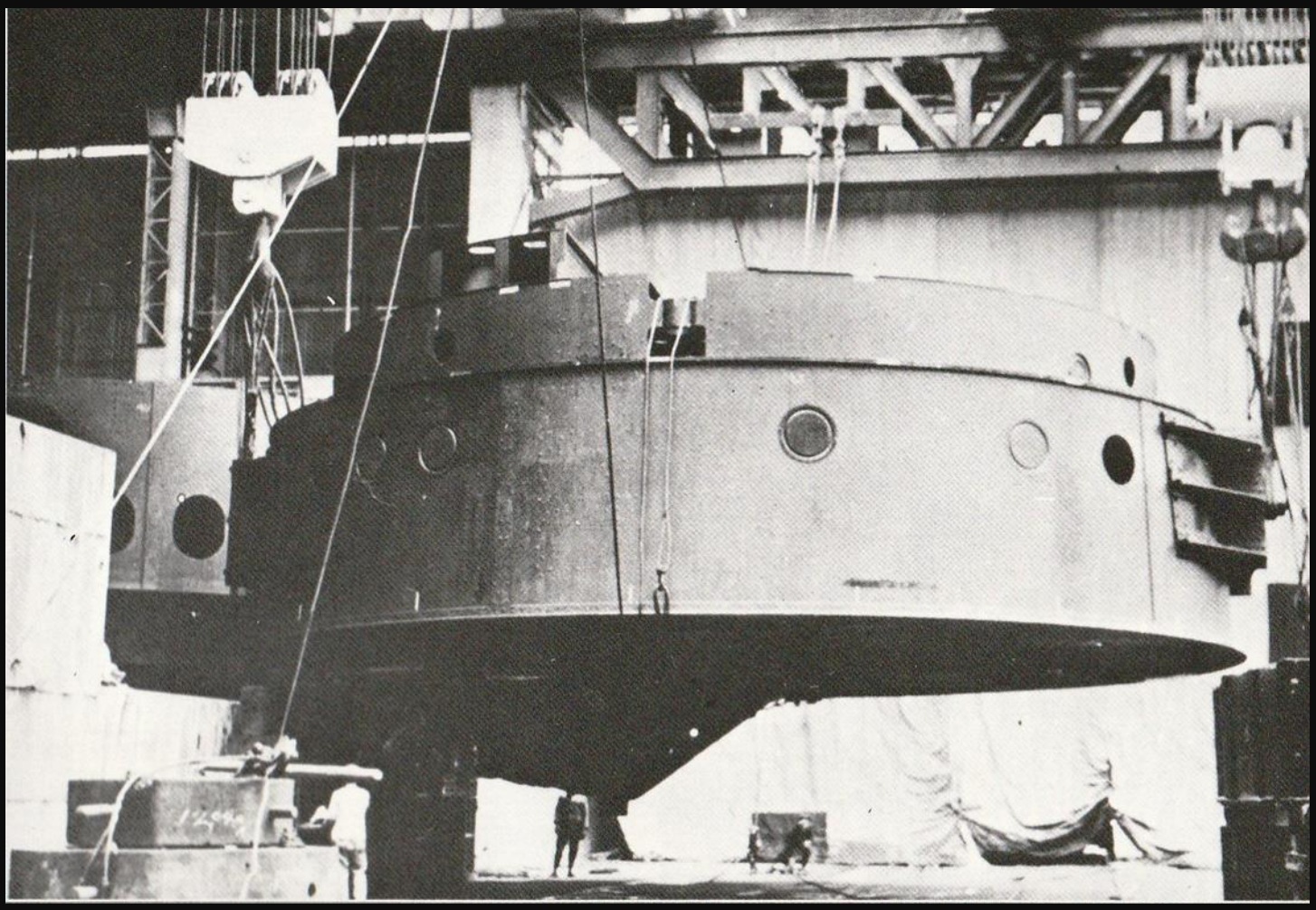
Christian van der Sanden provides more information about this photo*: "June 3, 1940".*



5. Construction of Yamato

An interior part of one of the main turrets supporting the guns (note the openings) is lowered into place.

Christian van der Sanden provides more information about this photo*: "June 3, 1940".*

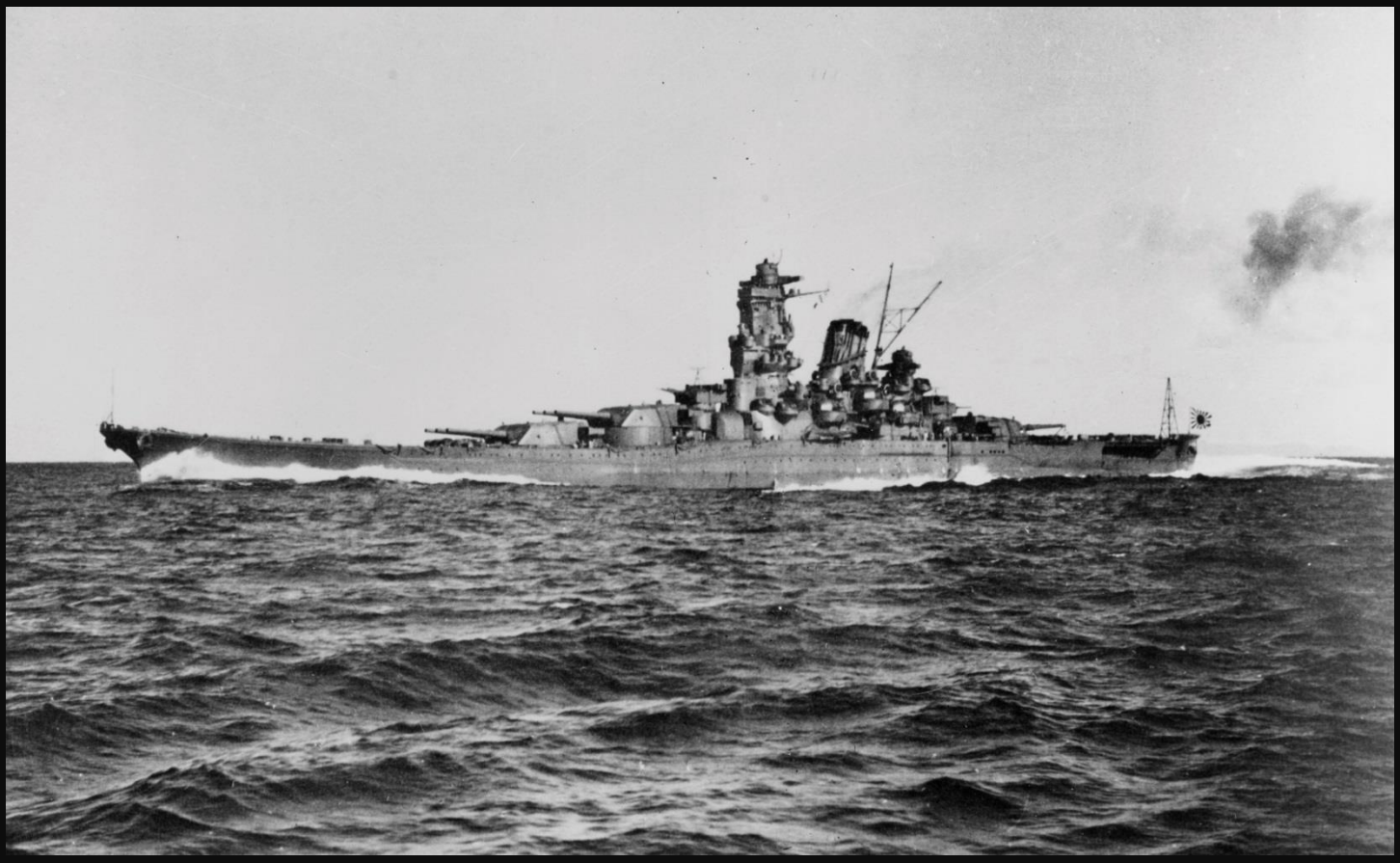


6. Construction of Yamato
A part of Yamato's main 18" gun barbettes is lowered into the hull during construction - note than man standing behind the barbette for a sense of scale.

Christian van der Sanden provides more information about this photo: *"June 3, 1940".*

7. Yamato Running Trials, October 1941
Make sure you zoom in on this image. This is a high resolution photo.

Christian van der Sanden provides more information about this photo: *"October 30, 1941 – Sea trials at full power in waters off Sukumo."*



8. Yamato Running Trials, October 1941
A wider version of the previous photo. Make sure you zoom in on this image. This is a high resolution photo.

9. Yamato Running Trials, October 1941
Colorized photo courtesy of Irootoko Jr.

Christian van der Sanden provides more information about this photo: *"October 30, 1941 – Sea trials at full power in waters off Sukumo."*

10. Yamato Running Trials, 1941

This is perhaps the most iconic surviving image of Yamato, making about 27 knots during her trials. (I "flipped" this original photo to create the colorized intro photo to this Archive). Make sure you zoom in on this image. This is a high resolution photo.

Christian van der Sanden provides more information about this photo: *"October 20, 1941 - Sea trials at full power in bad weather in water off Sukumo."*

11. Yamato Running Trials 1941

Many thanks to Ed Low of the Facebook IJN Page for this version of the famous photo of Yamato on her trials (colorized by Grant Arthur). Ed also forwards the following quote from Vice-Admiral Niwata Shozo who was involved in Yamato's construction:

"The result was impressive and Yamato appeared off Tosa on 18 December 1941 to make her trial. On that day the sea was rough and a strong wind of 20m/s (44.7mph) from the southeast. Three submarine chasers that accompanied her dropped out of formation and proceeded to port to avoid the bad weather. But the huge ship of 70,000 tons did not roll at all and attended 27.4(27.46) knots with 153,000 (153,550) shp, an excellent achievement beyond imagination."

12. Yamato Running Trials, October 1941

13. Yamato Running Trials, October 1941
Colorized version of previous photo courtesy of Irootoku Jr.

Christian van der Sanden provides more information about this photo*: "October 30, 1941 – Sea trials at full power in waters off Sukumo."*

14. Yamato Running Trials, October 1941
Christian van der Sanden provides more information about this photo: *"October 30, 1941 – Sea trials at full power in waters off Sukumo."*

15. Yamato Running Trials, 1941

Recently (2024) found photo of Yamato. Thanks to Christian van der Sanden for providing additional information.

Christian van der Sanden provides more information about this photo: *"October 26, 1941 - Sea trials at full power in waters off Sukumo."*

16. Battleship Musashi fires her 18.1" guns

On May 5, 2015, a Japanese newspaper published this photo of Musashi firing her main rifles during gunnery trials. The photo was provided by the family of BB Musashi's gun operator, Tameshige Nagahashi, and had never been published until 2015.

aki_onda on Tully's Port adds this detail:

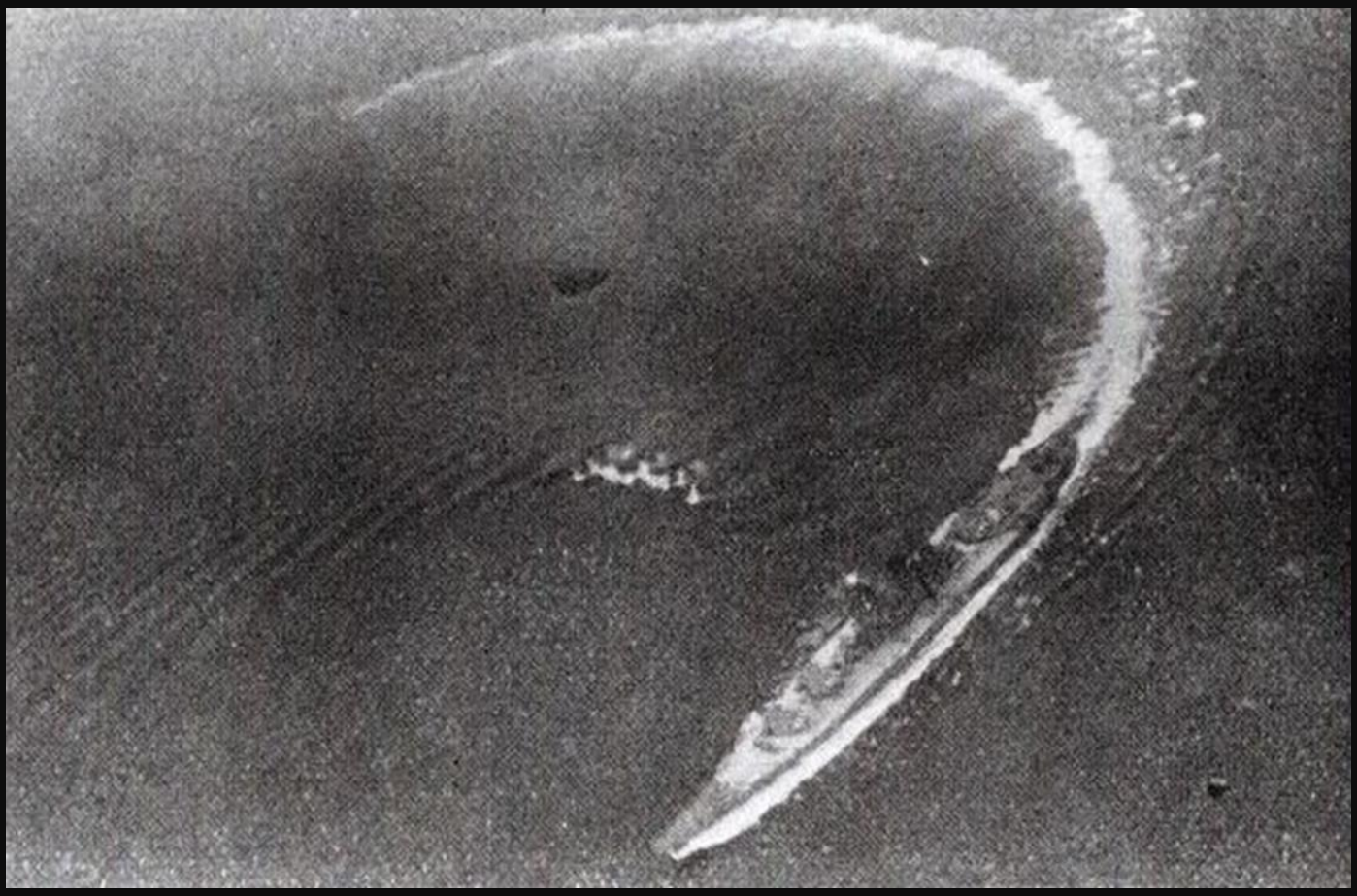
"According to former JSDMF RAdm TUTSUMI Akira (Retired), this photo is authentic. Judging from records, this photo was taken on July 26 or 29, 1942 at IYONADA. Just a few days before her Commission on Aug. 5, 1942"

To the best of my knowledge, this is the only close-up photo of the Yamato-class firing its big guns. In this photo it appears that Musashi has just fired a 3-shot salvo with her rear "C" turret.

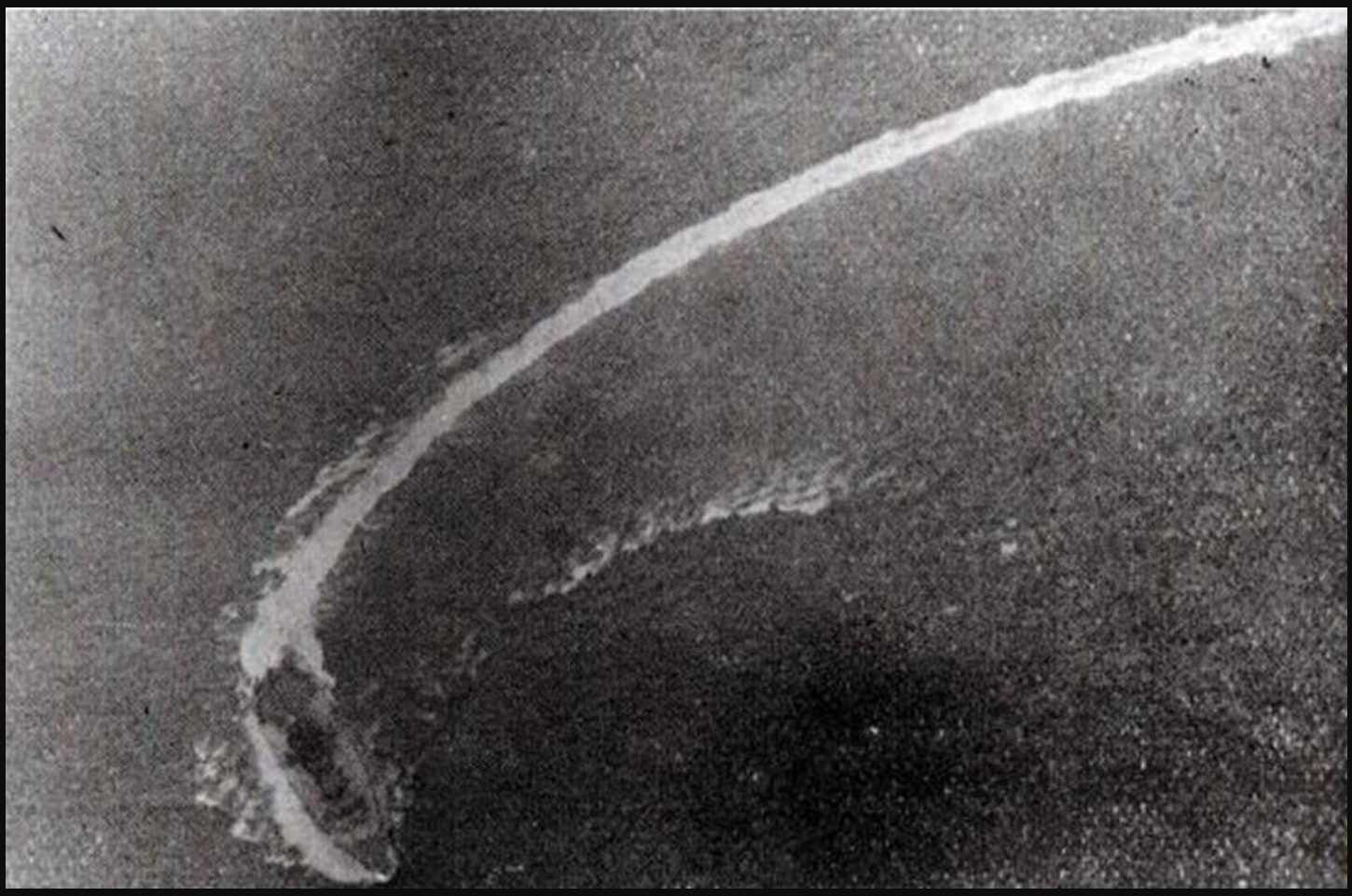
17. Battleship Musashi fires her 18.1" guns
A wider version of the previous photo - note the size of the shockwave generated on the water by the blast.

18. Battleship Musashi firing its 18.1" guns
A colorized version of the previous photo.

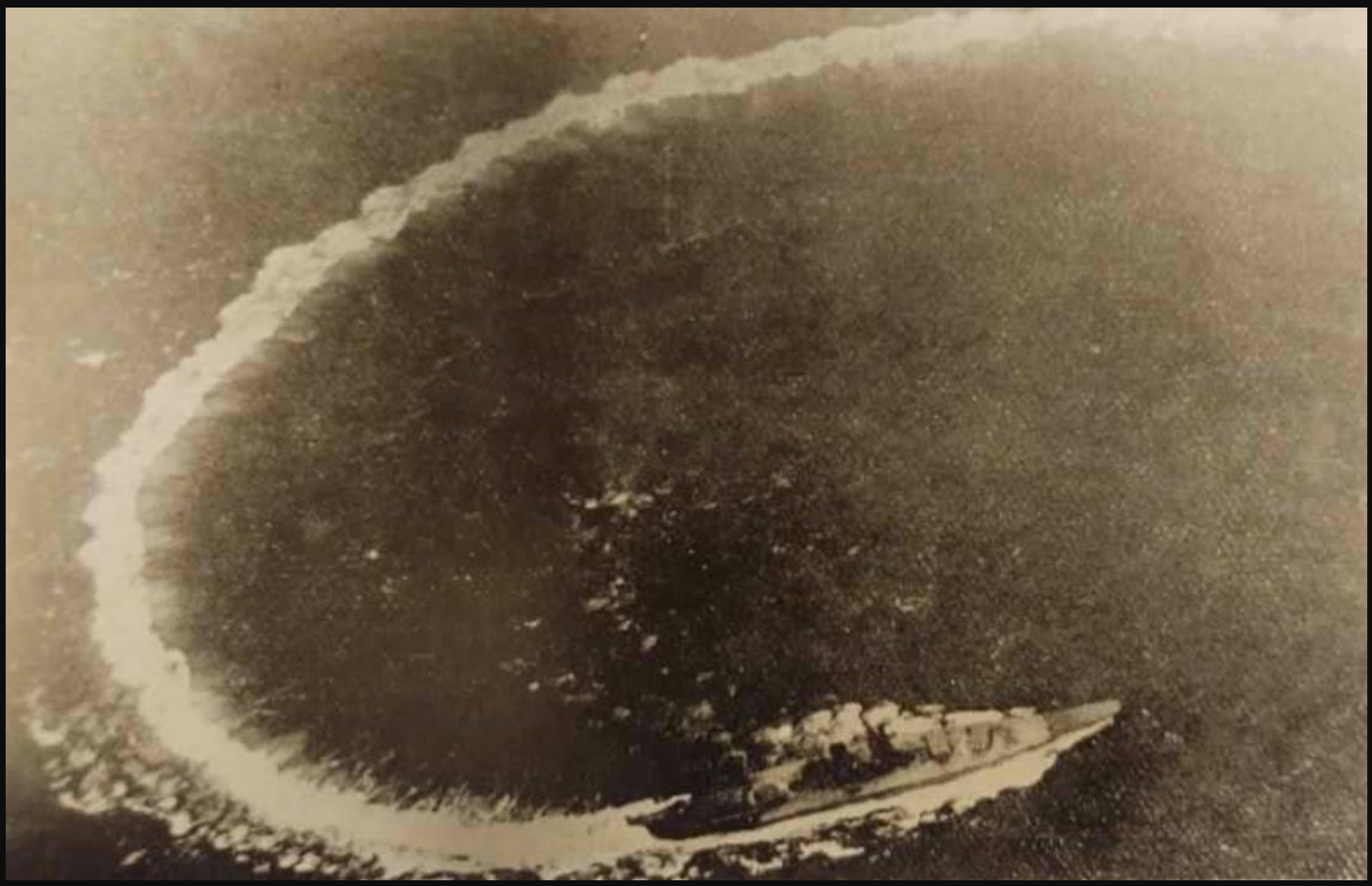
19. Musashi Trials October 30th 1942
Photo provided by Christian van der Sanden in 2024.



20. Musashi Trials October 30th 1942
Photo provided by Christian van der Sanden in 2024.



21. Musashi Trials October 30th 1942
Photo provided by Christian van der Sanden in 2024.



22. Battleship Musashi Maneuvering during her trials, 1942

Note her tight turning radius, remarkable for ships of this size. Thanks to Christian van der Sanden for identifying the ship and the year the photo was taken.

23. Battleship Musashi Underway 1943

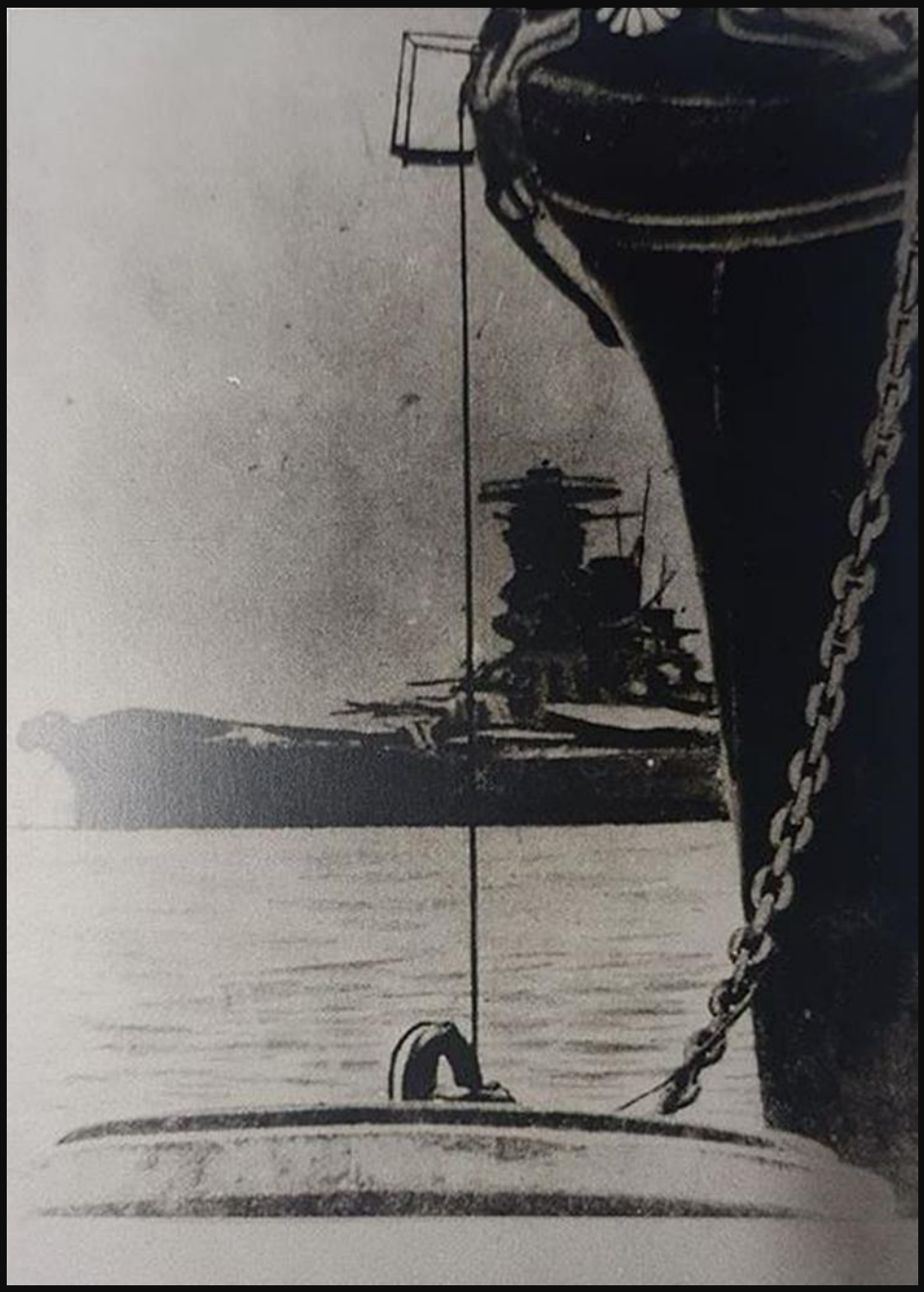
This photo was revealed by the Kure Maritime Museum (aka "Yamato Museum") on 04/26/2019. It shows Battleship Musashi.

The Yamato Museum is apparently of the opinion that the photo was most likely taken in January, 1943. Mutsuo Sasaki chimes in with a little more detail (from modelwarships.com discussion forum):

".. probably taken after 22nd of Jan. 43. She performed a practice with torpedo planes, but the (Yamato) Museum is not fully sure of the exact date of the shot yet.. (I) suppose the black colored stuffs are provisions, these might have been offloaded when arriving on the 22nd and the deck ought to be empty. My assumption is Musashi is quite near to the port, then, torpedo planes came flying over, for the practice. If so, the pic must have been taken on the very day of 22nd."

(Note that the wing and part of the fuselage of the plane taking this photo is visible on the bottom left).

24. Battleship Musashi Underway, 1943
Colorized version of the previous photo.



25. View of Musashi

Detail from a larger photo. Christian van der Sanden provides more information about this photo*: "Summer 1943 – Musashi at Truk."*

26. Admiral Yamamoto on board Yamato, 1942.
Admiral Yamamoto is in the center of the first row, seated with his sword. Yamato would be his headquarters during the battle of Midway. Later in 1942 it would be transferred to the newer Musashi.

Christian van der Sanden provides more information about this photo:

"1942 – A commemorative photo of the Combined Fleet Headquarter on the portside of the Yamato. Behind the left 15,5cm wing triple turret No. 2 and under the base of the twin 12,7cm HA gun no. 6.."

27. Admiral Yamamoto on board Yamato

"Admiral Yamamoto with staff under Yamato's main (i.e. #1) turret" was the caption underneath this photo.

Thanks to Christian van der Sanden for providing this photo and providing more information*:*

"February 16, 1942 – It was a clear Monday on the Yamato at 10:45 a.m. A Commemorative photograph was taken, welcoming Vice Admiral Tomoshige Samejima."

28. Admiral Yamamoto on board Yamato – colorized version of previous photo.

29. Musashi Film Clip

The only known moving film taken aboard either battleship is this short clip from an IJN newsreel, reputedly from 1942, showing the future Commander in Chief of the Combined Fleet, Admiral Mineichi Koga greeting EMperor Hirohito upon arriving onboard Musashi. Only a part of the superstructure is visible before the scene ends. The details of these these two ships were 'top secret' within Japan during the war so no other footage of either one of them survives.

Christian van der Sanden writes:

"June 24, 1943 – Admiral Mineichi Koga is welcoming the Emperor on board of the Musashi."

30. Musashi Film Clip Pt 2.

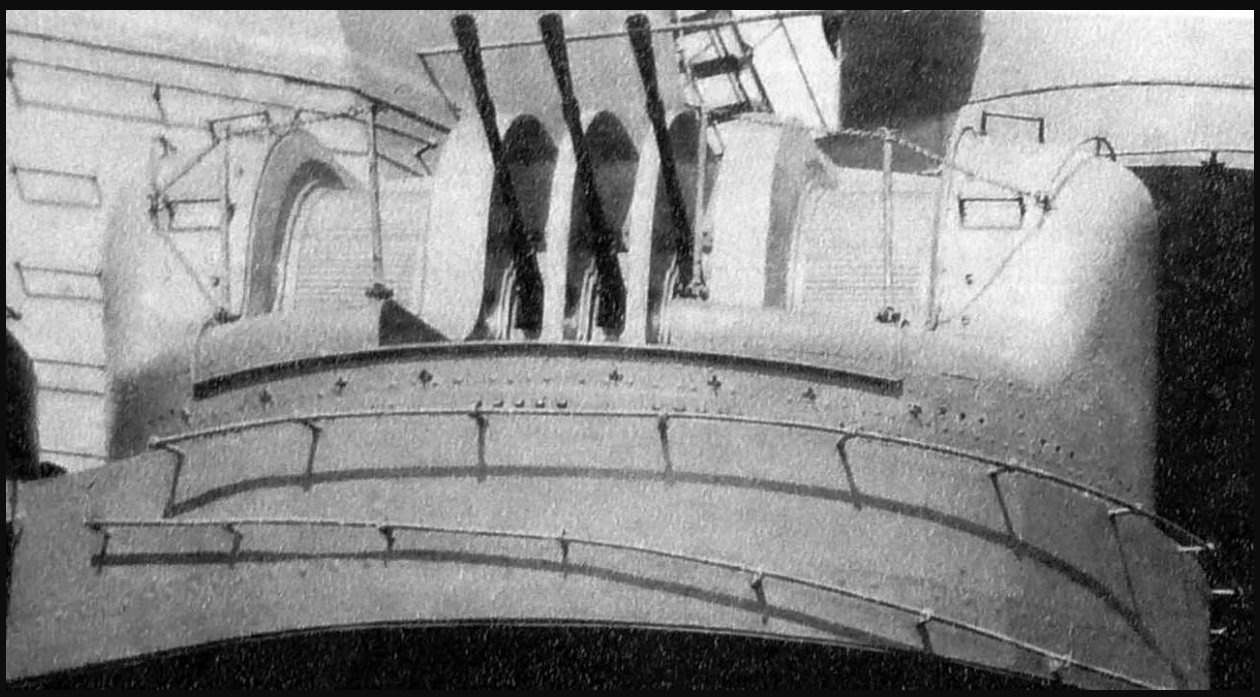
The continuation of the previous pan shot shows a little more of Musashi's superstructure just before the scene ends. Christian van der Sanden writes*:*

"You can see the modified version of the Type 94 Rangefinder (4.5m). As we know, only Musashi got this modification between end of 1942 and early 1943...June 24, 1943 – Admiral Mineichi Koga is welcoming the Emperor on board of the Musashi."

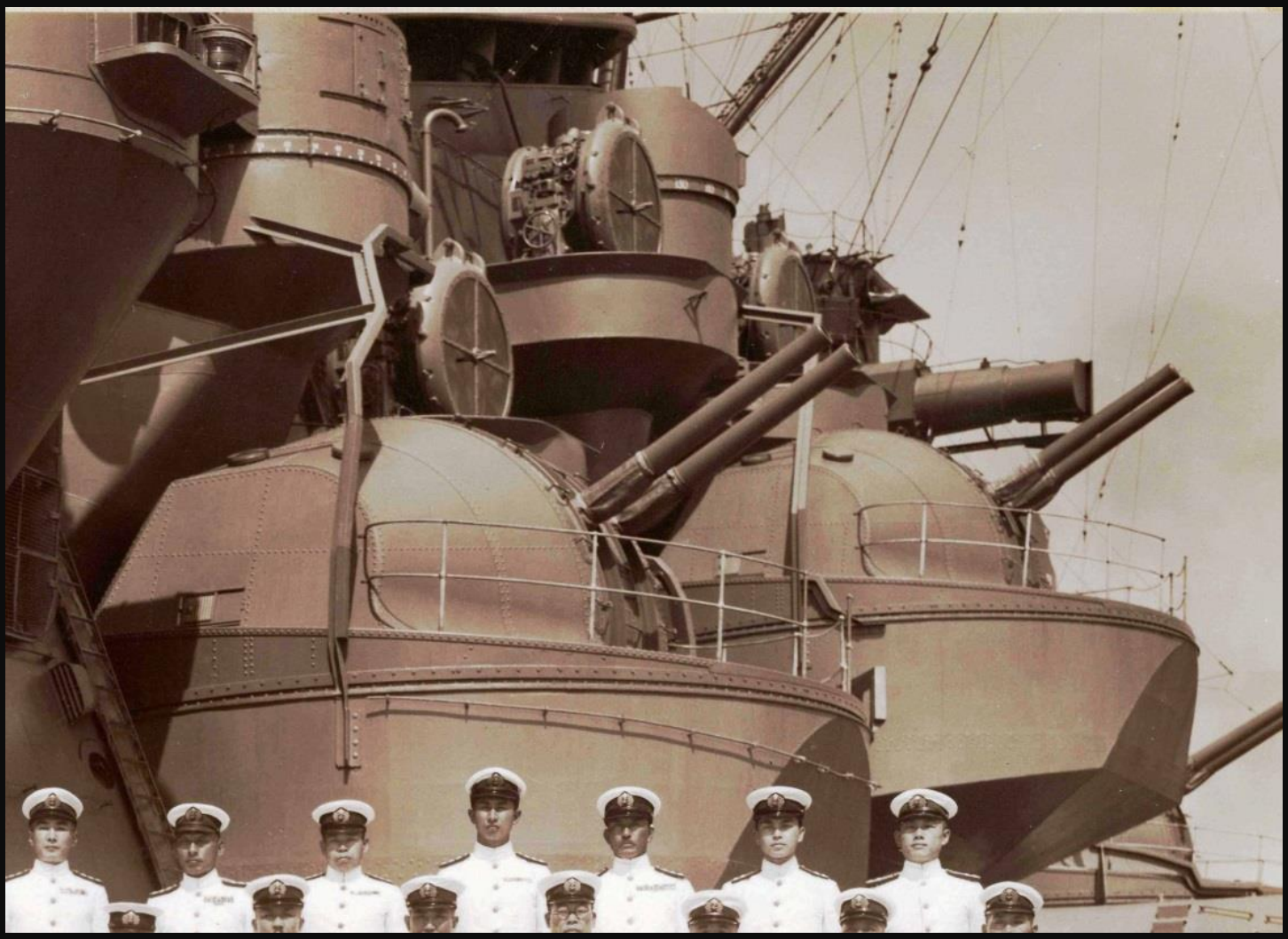
31. Emperor Hirohito onboard Musashi, 1943

Emperor Hirohito and his staff onboard Musashi, June 24, 1943. This is a very large and detailed photo.

32. Emperor Hirohito onboard Musashi, 1943
Colorized version of the last photo, courtesy of Irootoko Jr.

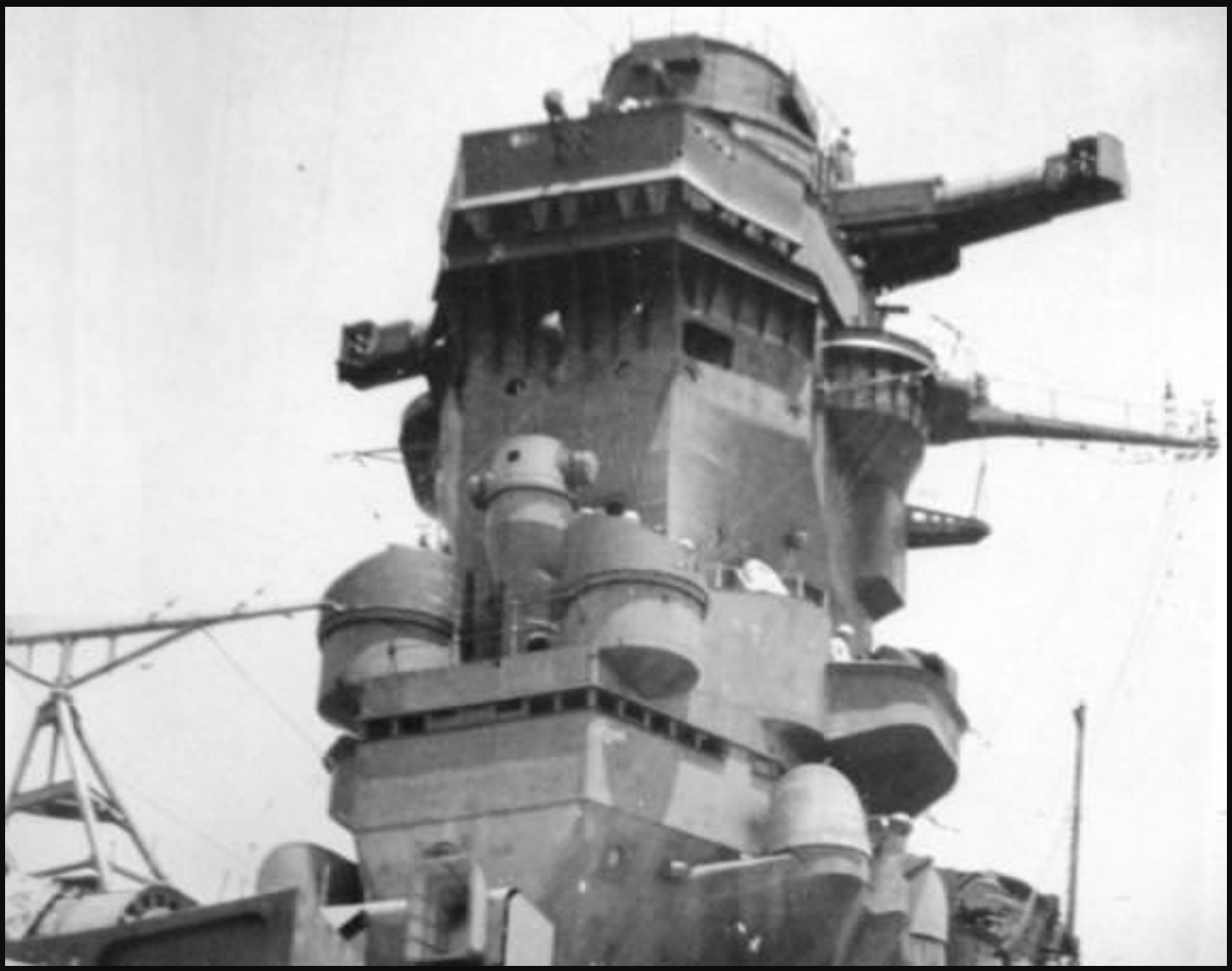


33. Features of Yamato and Musashi
Close-up of one of Musashi's .25mm AA gun turrets.

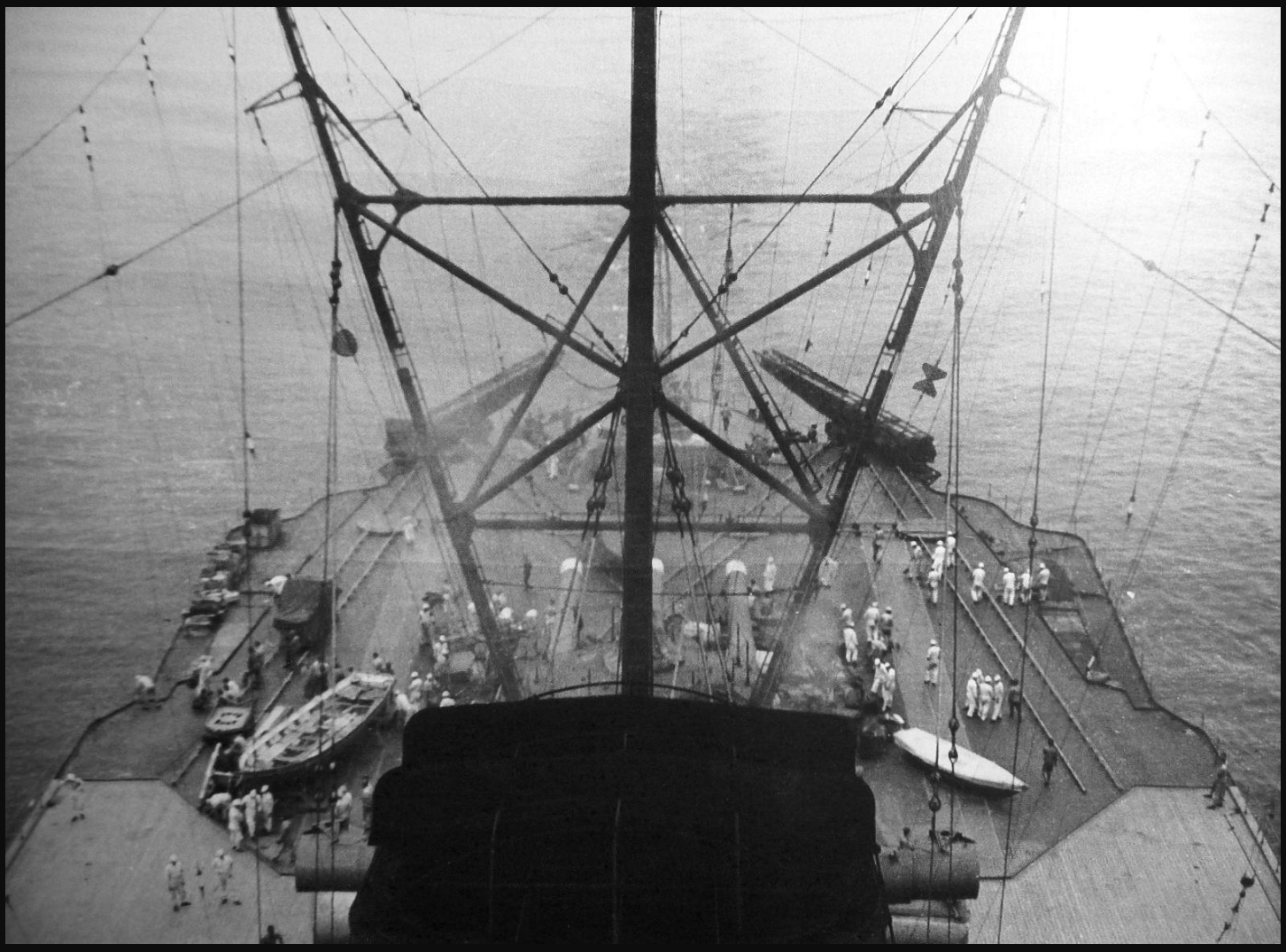


34. Details of Yamato and Musashi

In this photo we can see Musashi's 5" AA batteries, her searchlights as well as blocking steel girders designed to prevent the 5" batteries from rotating too far and accidentally firing into the superstructure in the heat of battle.



35. Features of Yamato & Musashi
Close-up view of Musashi's Main Tower.



36. Features of Yamato & Musashi

Aft view of the Musashi's flight deck taken from the back of the main tower. (See the funnel and the metal grating on top of it in the foreground). Note the life boat. Also see the rails that the seaplanes would be rolled around on.

37. Features of Yamato & Musashi

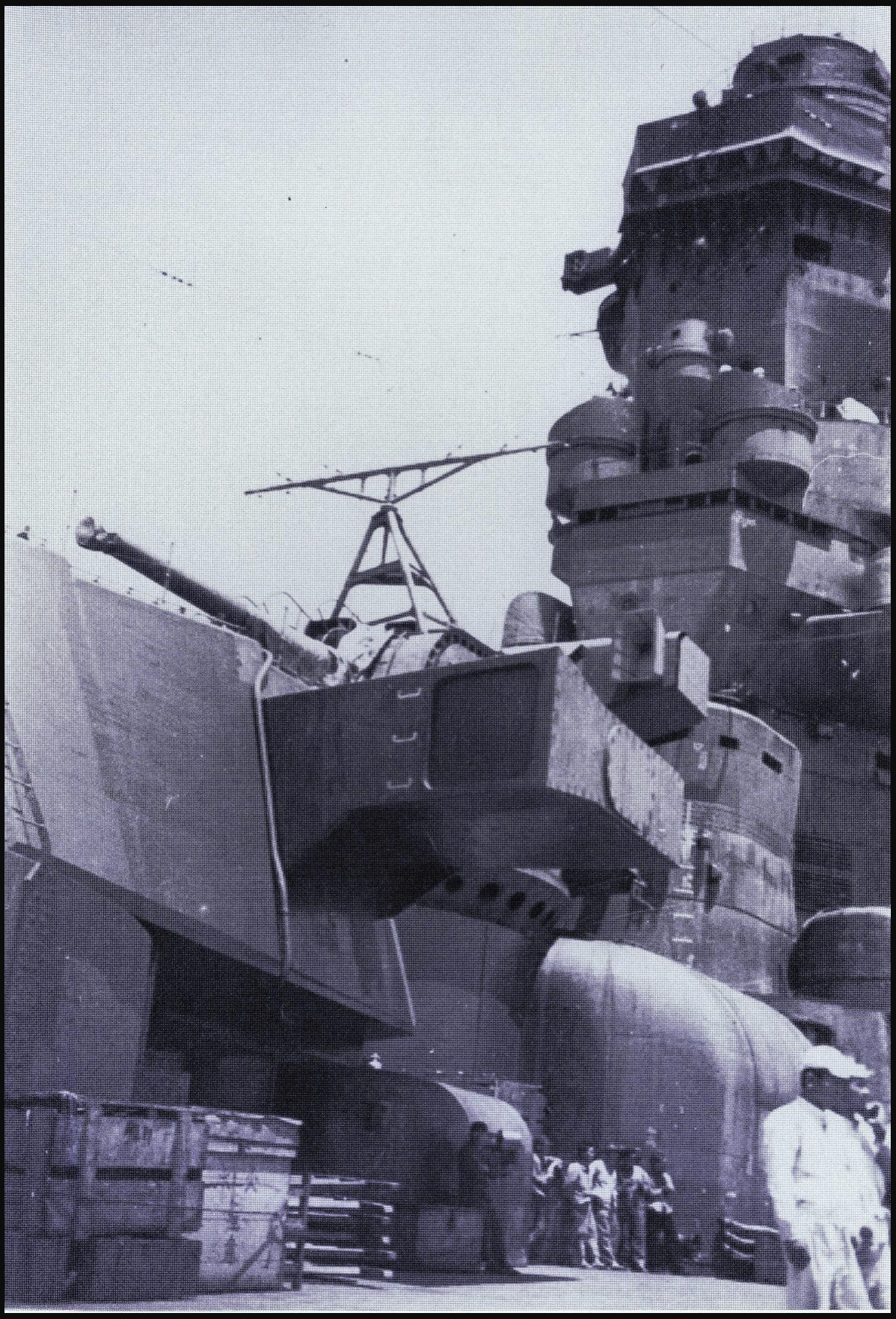
Crane Deck detail – Note the "Anti-Slipping Plates". Thanks to Christian van der Sanden for providing this photo.

38. Detail of Musashi Rear, 1943

Photo dated June 24, 1943. Thanks to Christian van der Sanden for additional information about this photo.

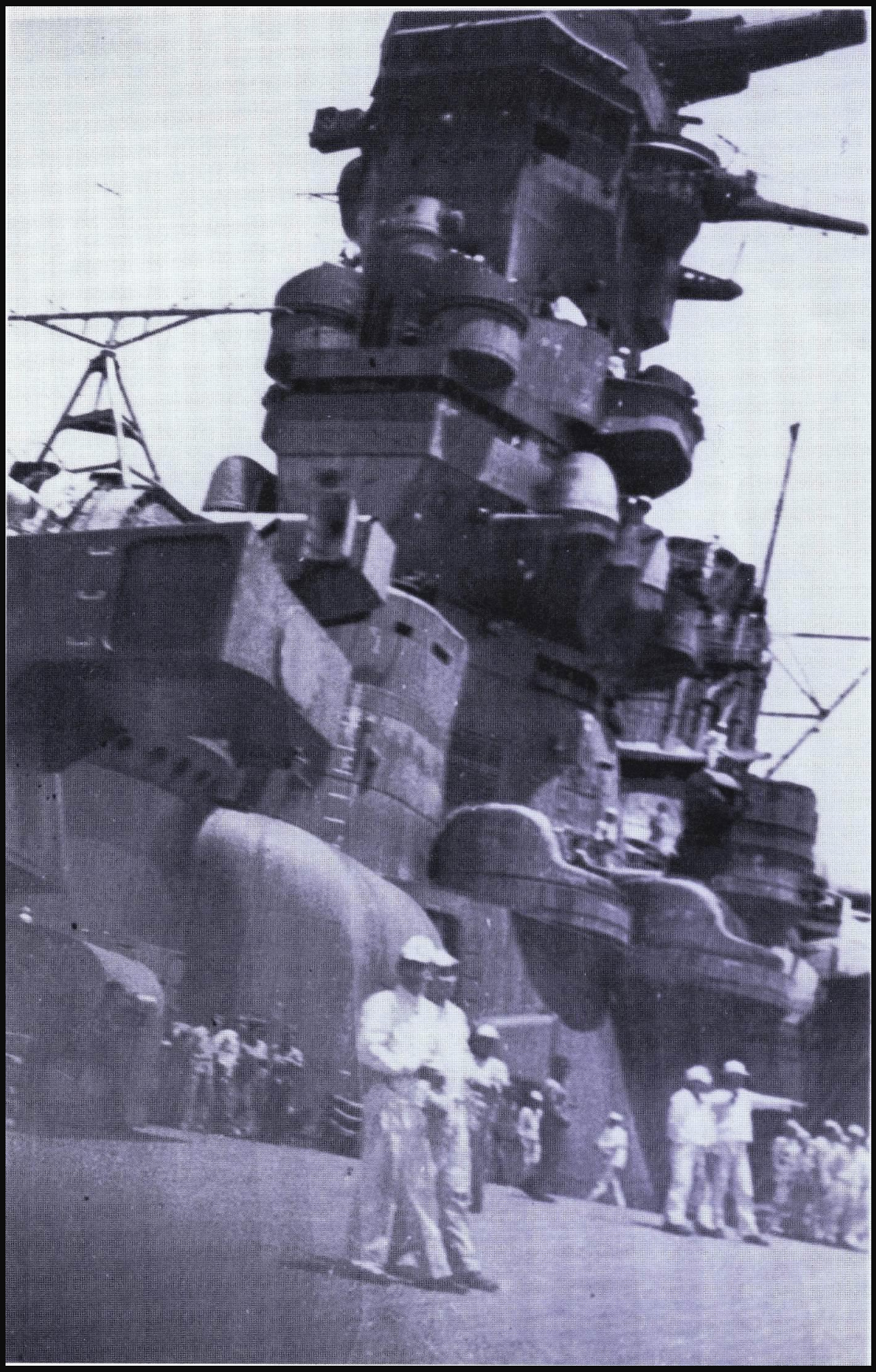
39. Detail of Musashi Rear, 1943

Photo dated June 24, 1943. Thanks to Christian van der Sanden for additional information about this photo.



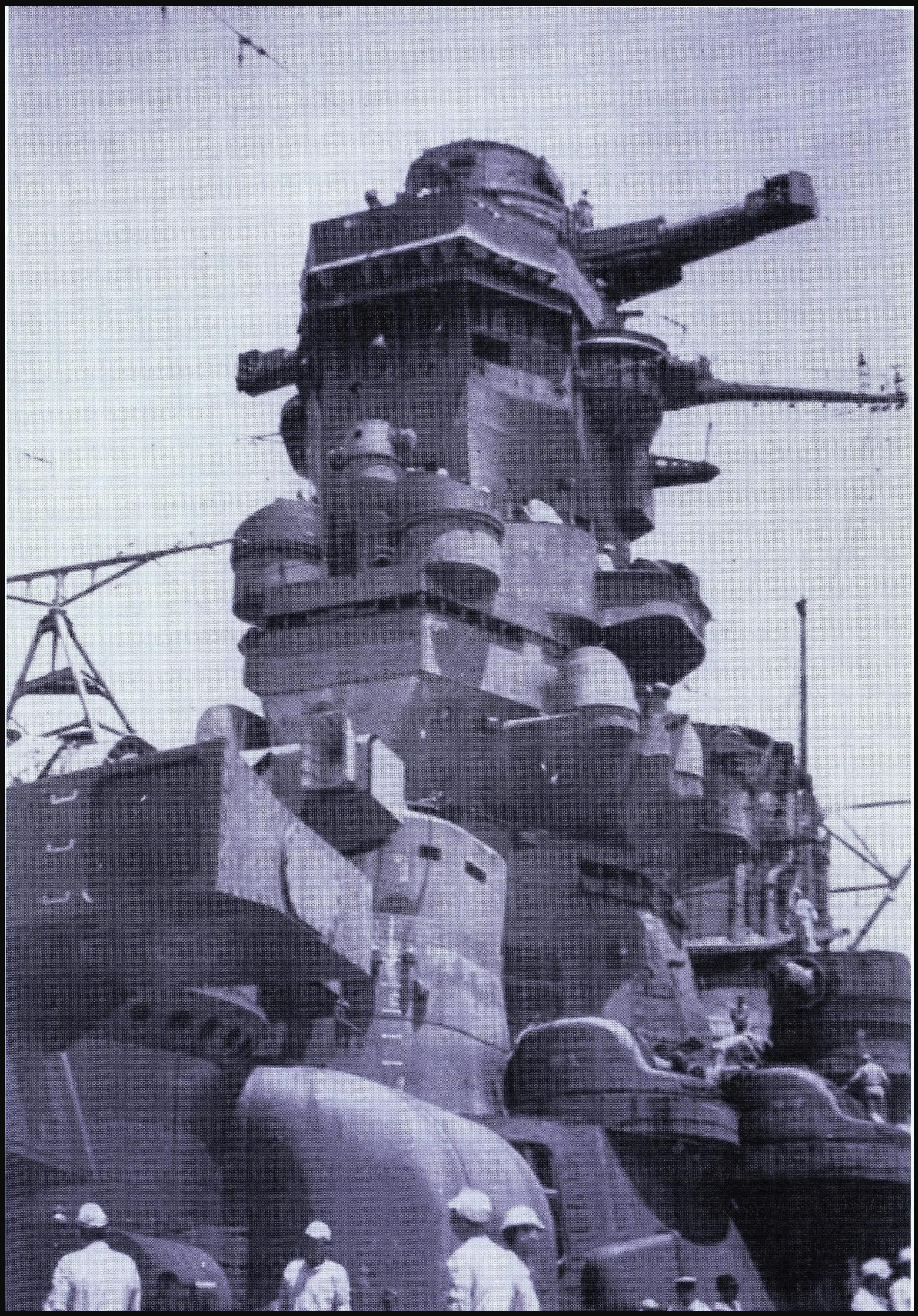
40. Detail of Musashi Superstructure, 1943

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

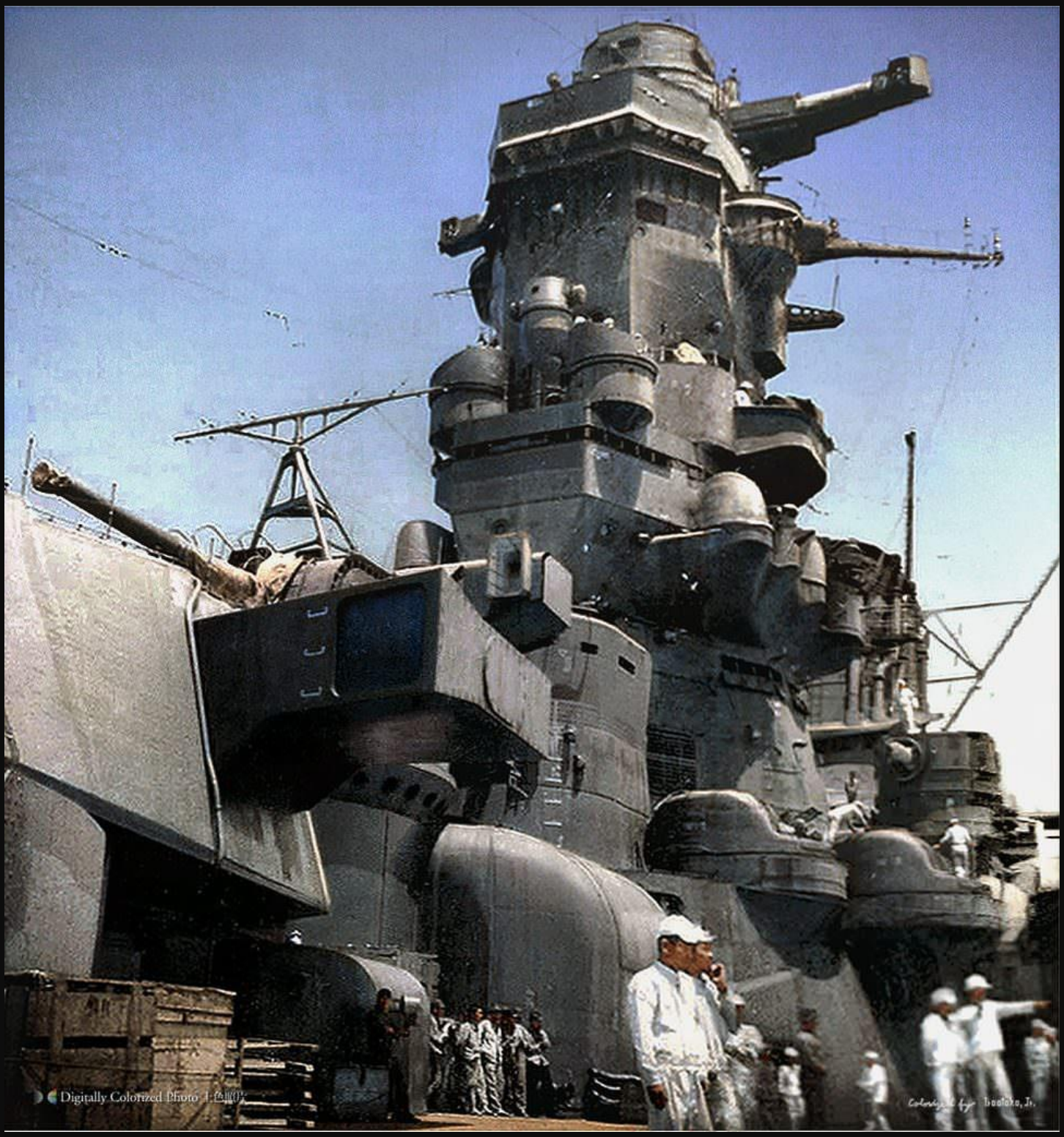


41. Detail of Musashi Superstructure, 1943

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

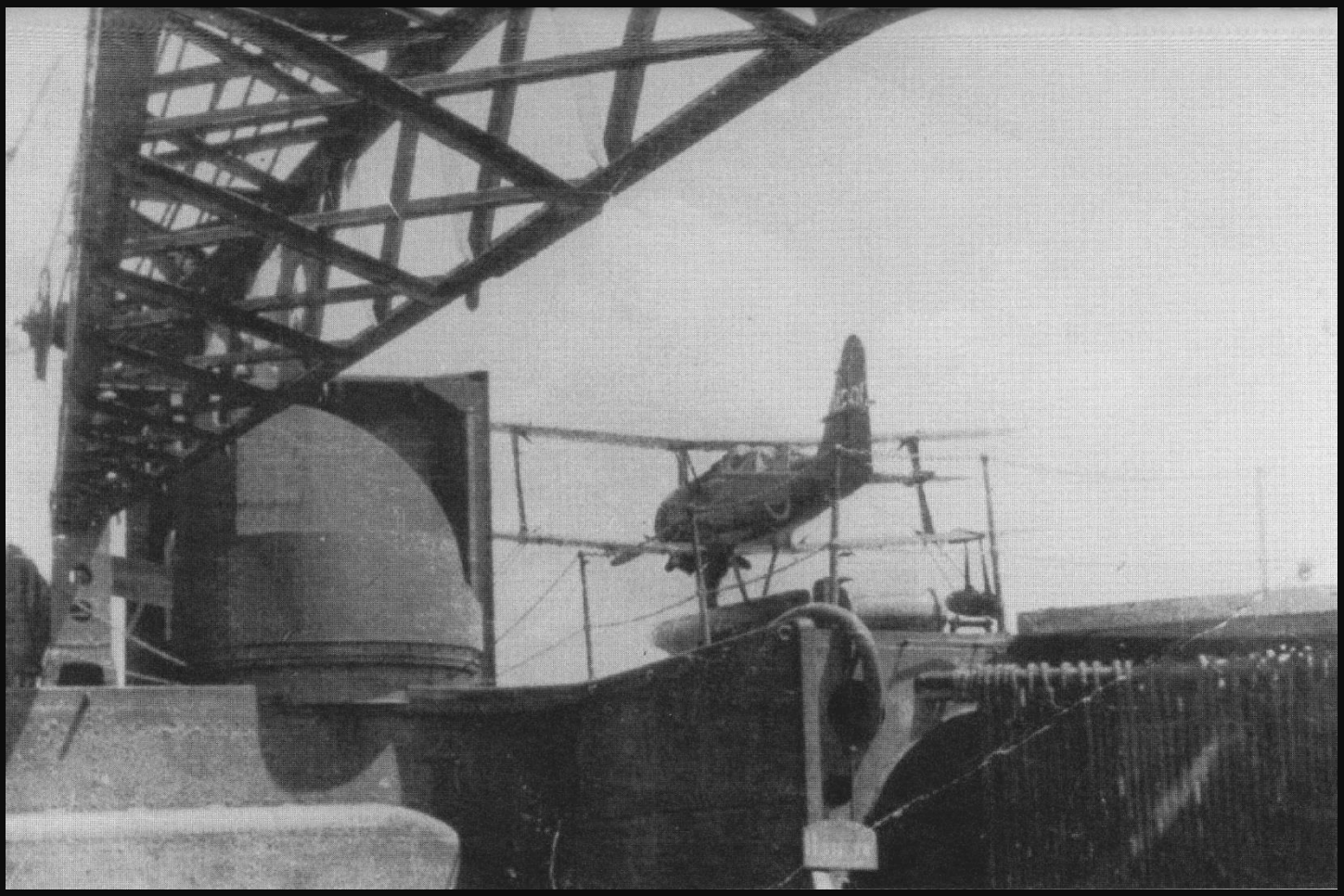


42. Detail of Musashi Superstructure, 1943
Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.



43. Features of Yamato & Musashi

Photo of Musashi's deck that I pieced together with Photoshop using the previous three photos taken by the same cameraman. Christian Van Der Sanden writes that this was taken during Musashi´s trials in June-July 1942. The photo was subsequently colorized by Irootoku Jr.



44. Features of Yamato & Musashi

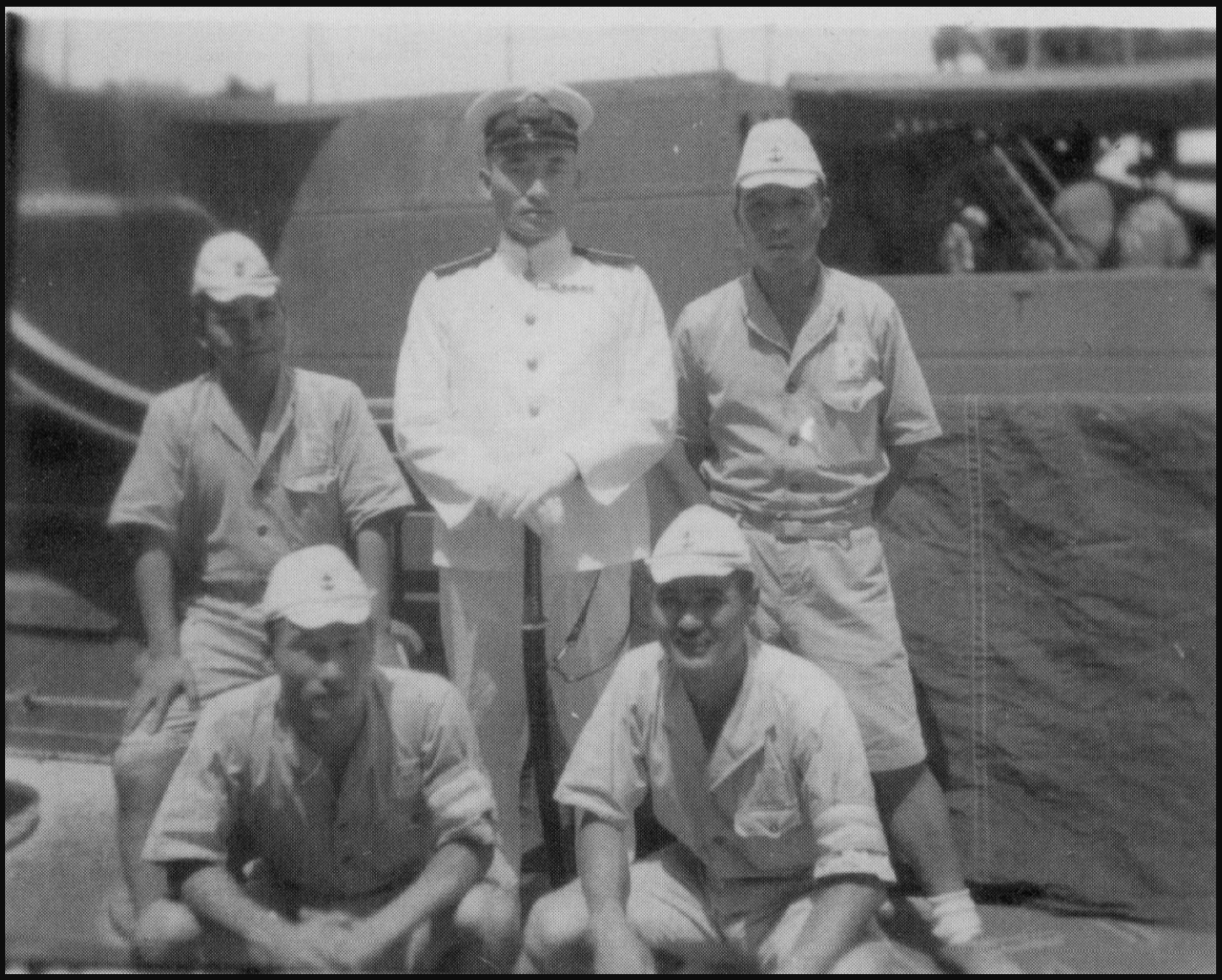
A rare look at one of Musashi's Float Planes, taken from the rear edge of the aircraft well. The structure at top of the photo is the crane arm, the view is looking forward and the opposite lip of the aircraft well is visible below the end of the crane arm.

Christian van der Sanden writes:

"Musashi after her big refit in April 1944. Proven by the Type 95 Machine Gun Control Tower next to the crane arm. This control tower was installed during the big refit in April 1944."

45. Features of Yamato & Musashi

Personal photo of an officer sitting on Musashi's Stern Aircraft Hangar Crane Deck. The crane arm is visible behind him, as is part of an aircraft catapult on the upper right. The well of the hangar is directly behind him. Photo courtesy of Christian van der Sanden.

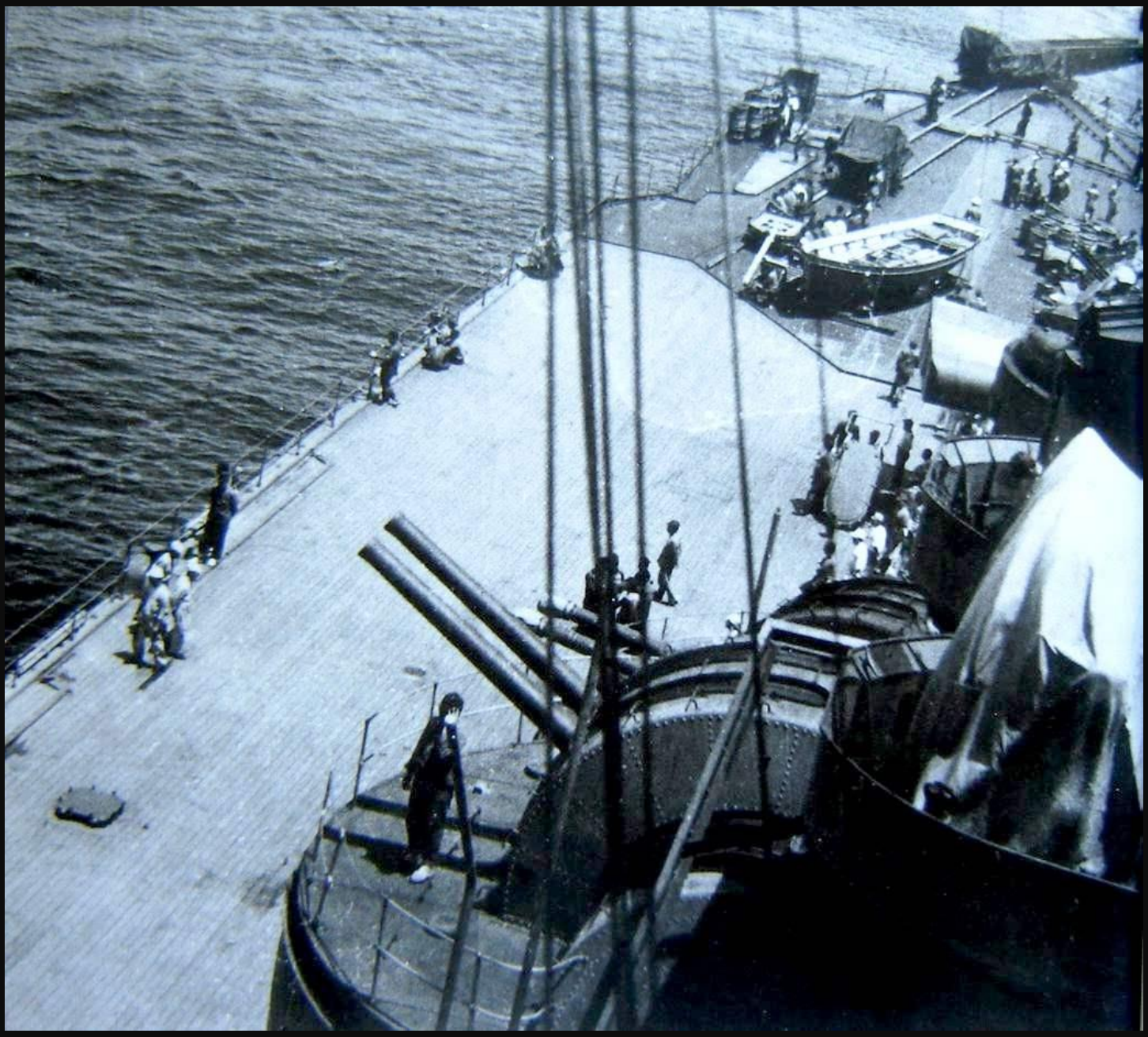


46. Features of Yamato & Musashi

The same officer seen in the last photo poses with several sailors on Musashi's Stern Aircraft Hangar Deck. You can see the well of the hangar behind them, and a part of one of the float plane launch catapults on the upper right. Photo courtesy of Christian van der Sanden.

47. Features of Yamato & Musashi

Yamato Crew Members after her Big Refit in 1944 are seen on the rear Aircraft Deck. This photo is remarkable because you can see one of Yamato's float planes mounted on a dolly sitting on the rails of the Aircraft Deck. Parts of both the crane tower and the crane arm are visible in the upper left of the photo. Photo courtesy of Christian van der Sanden. (Note that there are several more crew photos from the aircraft deck and hangar area in the Miscellaneous Crew Photos chapter later on).

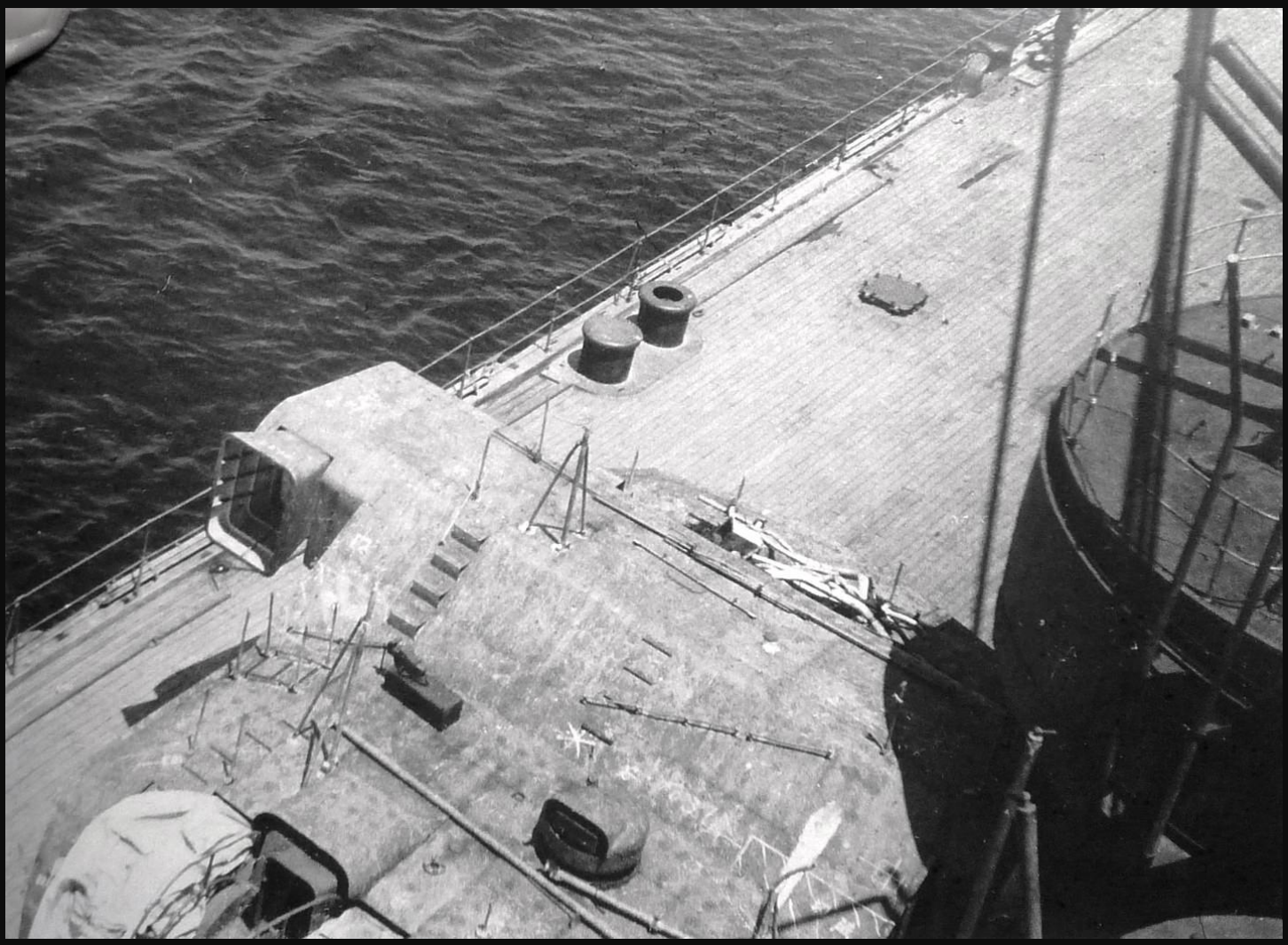


48. Features of Yamato & Musashi

5" anti-aircraft guns amidships of Musashi. 6 of these 12 gun mounts were enclosed in turrets such as the one shown here; the other 6 were housed in open 'buckets', making them much more vulnerable to enemy fire. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

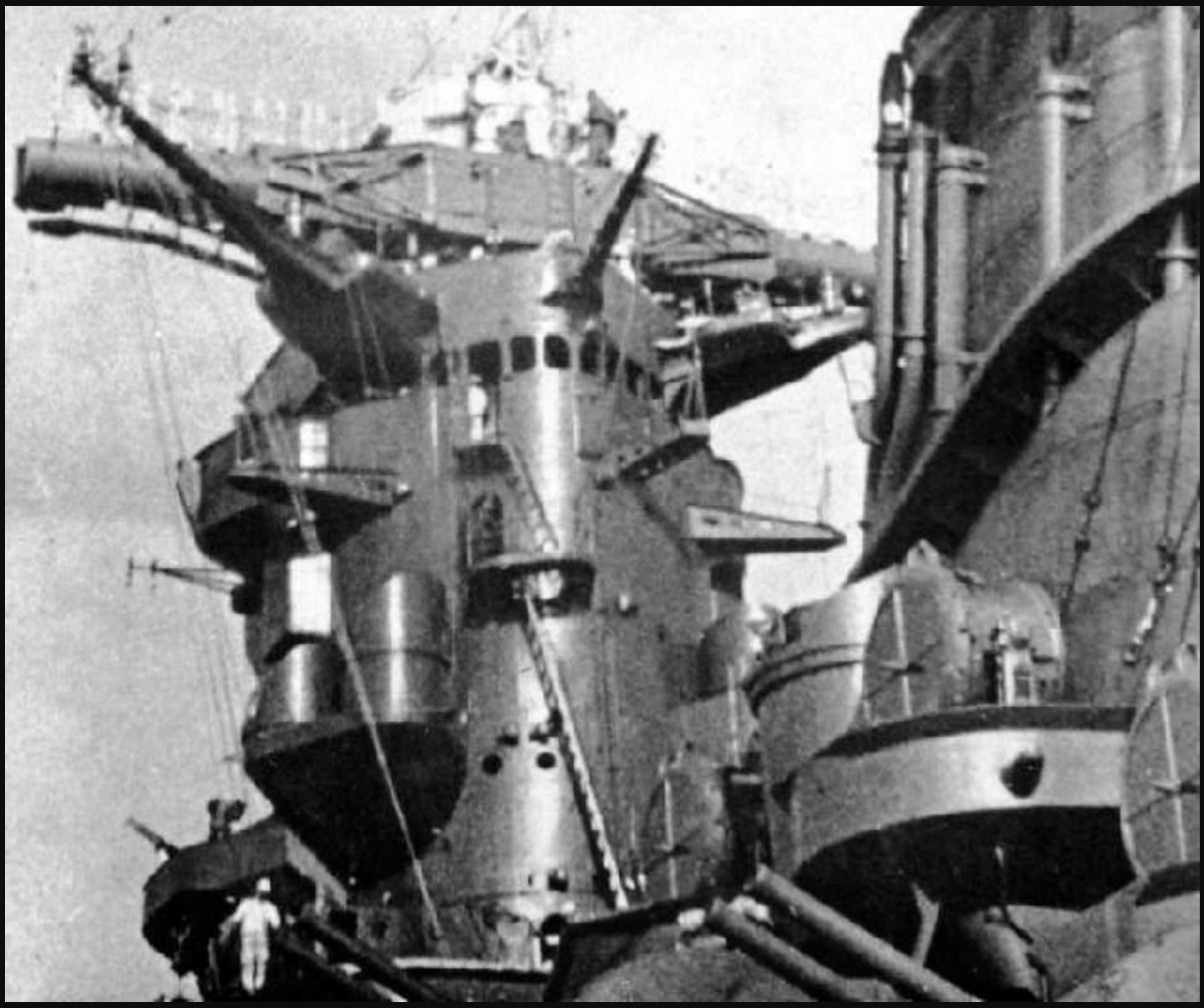
49. Features of Yamato & Musashi

A sailor is dwarfed by Musashi's #2 forward 18.1" gun turret. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.



50. Features of Yamato & Musashi

This photo of the starboard deck of Musashi shows one of the two extra 6" gun batteries that were originally mounted amidships. These were later removed to make way for more anti-aircraft guns. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.



51. Features of Yamato & Musashi

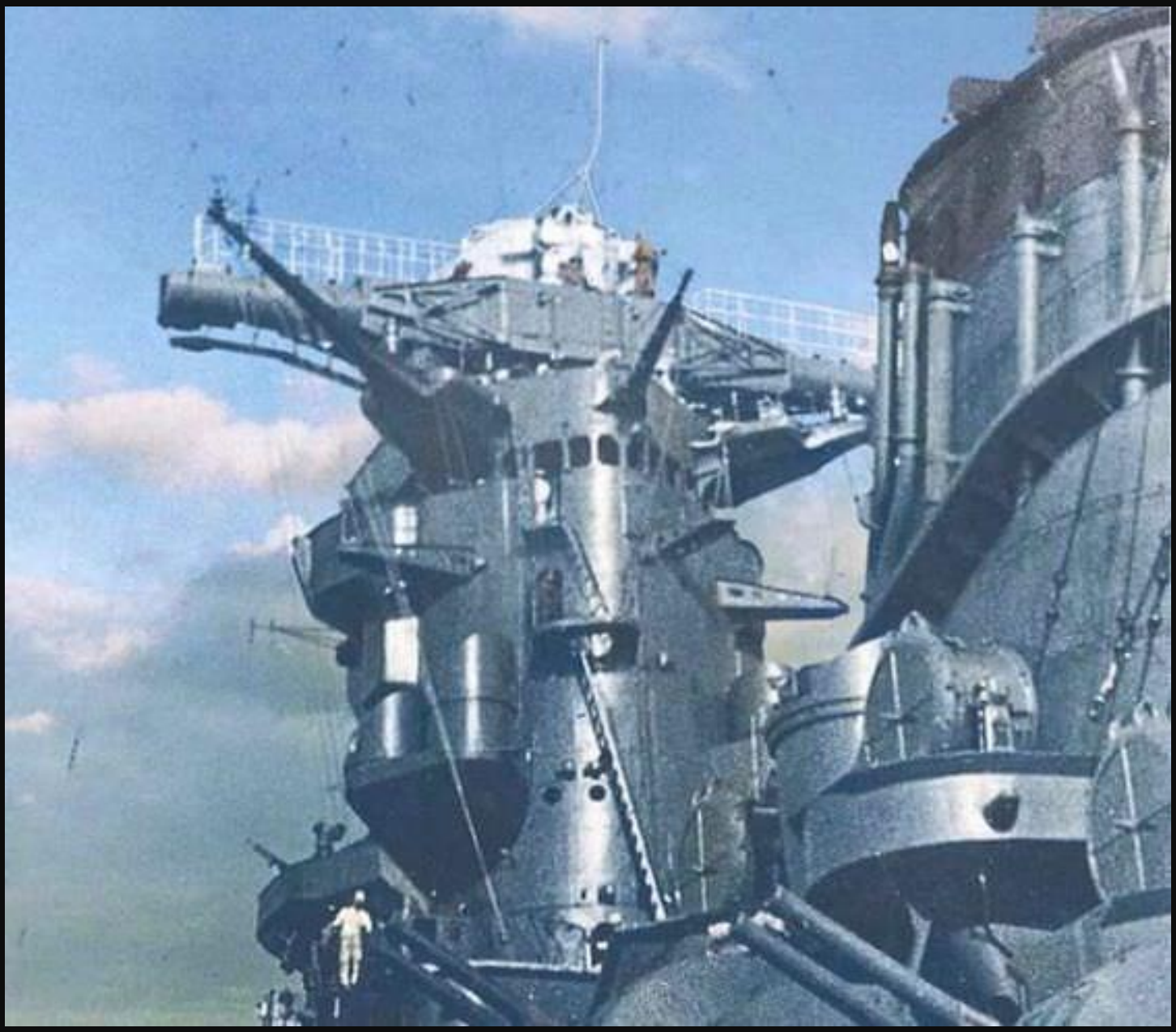
Rear of Musashi's main tower with rigging and funnel partly visible. This 1944 photo shows the radar antennae atop the main fire control director arms.

The windows just underneath the masts near the top of the tower are to the rear of the main bridge where Yoshida spent most of the final battle on Yamato. Incredibly, although equipped with massively thick bullet proof glass, the port holes on the bridge were kept open during the Ten-ichigo operation, as the Bushido Code demanded that the bridge crew be exposed to the same dangers as the unprotected machine gun crews on deck below.

This foolishness caused dozens of needless casualties on the bridge, vividly and graphically described by Yoshida in his book.

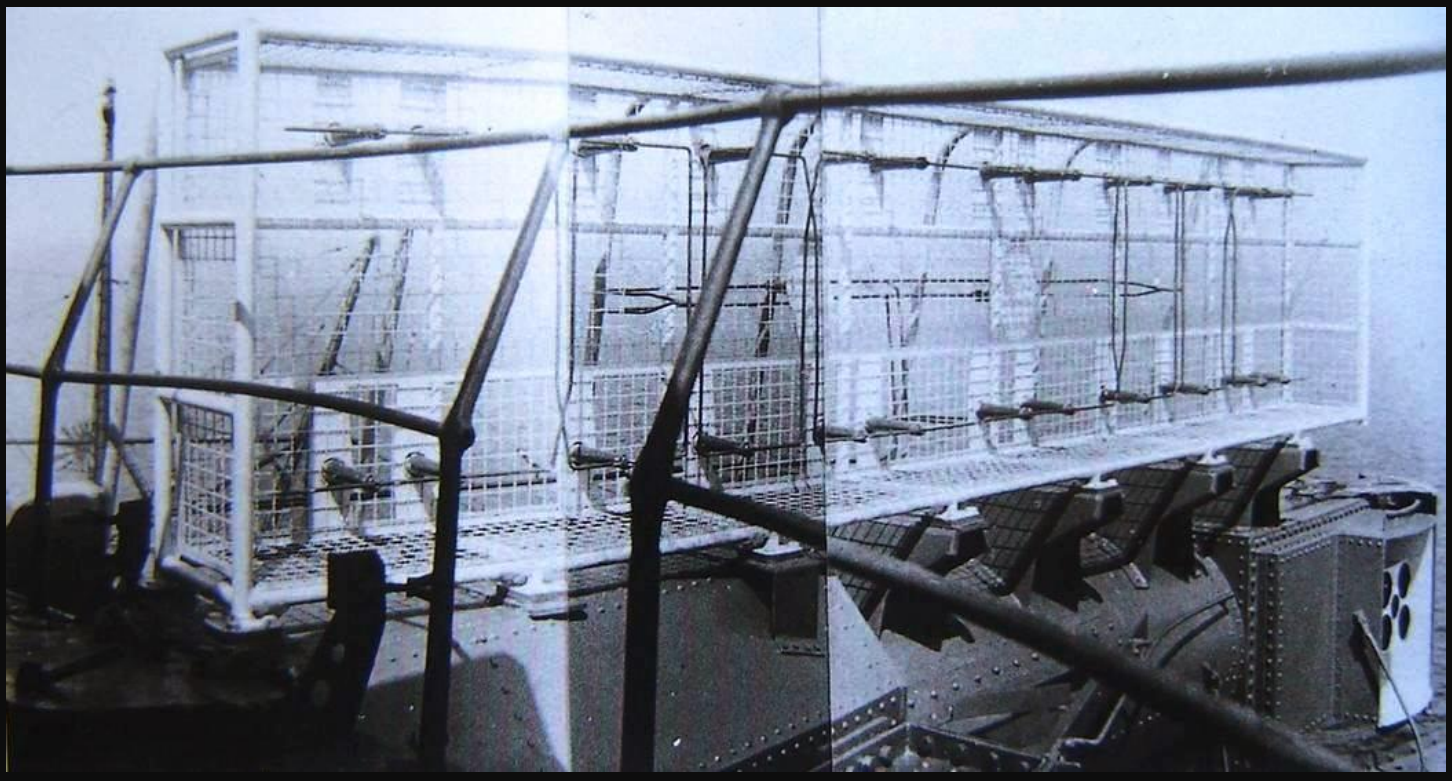
As he put it, each time that chunks of torn flesh and bodies were removed from the bridge, bloodstains remained on the floors and walls, *"like birthmarks".*

Christian van der Sanden writes: *“Late September 1942 – After installing a Type 21 Model 3 Air Search Radar on Musashi´s main 15m rangefinder. Photos were taken during tests of the new installed radar.”*



52. Features of Yamato & Musashi
Colorized version of the previous photo. Unsure if this was also colorized by Irootoko, Jr. Photo was posted on a Facebook IJN discussion group.

Christian van der Sanden writes*: "Late September 1942 – After installing a Type 21 Model 3 Air Search Radar on Musashi´s main 15m rangefinder. Photos were taken during tests of the new installed radar."*



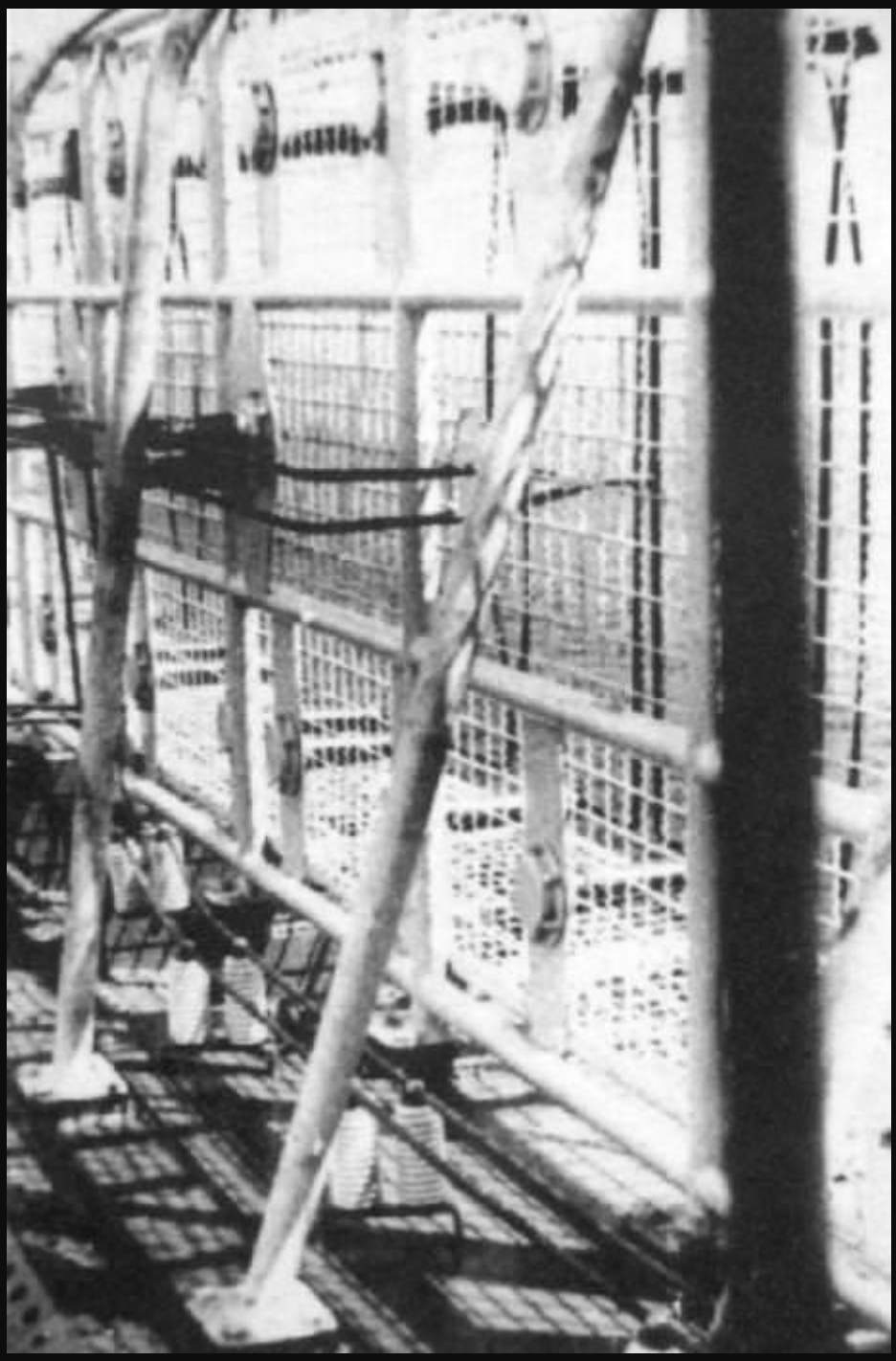
53. Features of Yamato & Musashi
Photograph of one of the two radar antennae installed on top of the arms of the main fire control director of Yamato & Musashi around 1944, atop the main tower. Photo is of Musashi.

As Assistant Radar Officer, Yoshida was in charge of the radar room aboard Yamato in 1945. His fortuitously timed watch on the bridge during the final battle saved his life, as the radar control compartment where he was stationed just hours earlier was completely wiped out by a direct bomb hit during the first attack wave.

Christian van der Sanden writes: *"Late September 1942 – After installing a Type 21 Model 3 Air Search Radar on Musashi´s main 15m rangefinder. Photos were taken during tests of the new installed radar."*

54. Features of Yamato & Musashi
Another view of Musashi's main tower in 1944, taken from the rear. Both of the radar antennae are clearly visible.

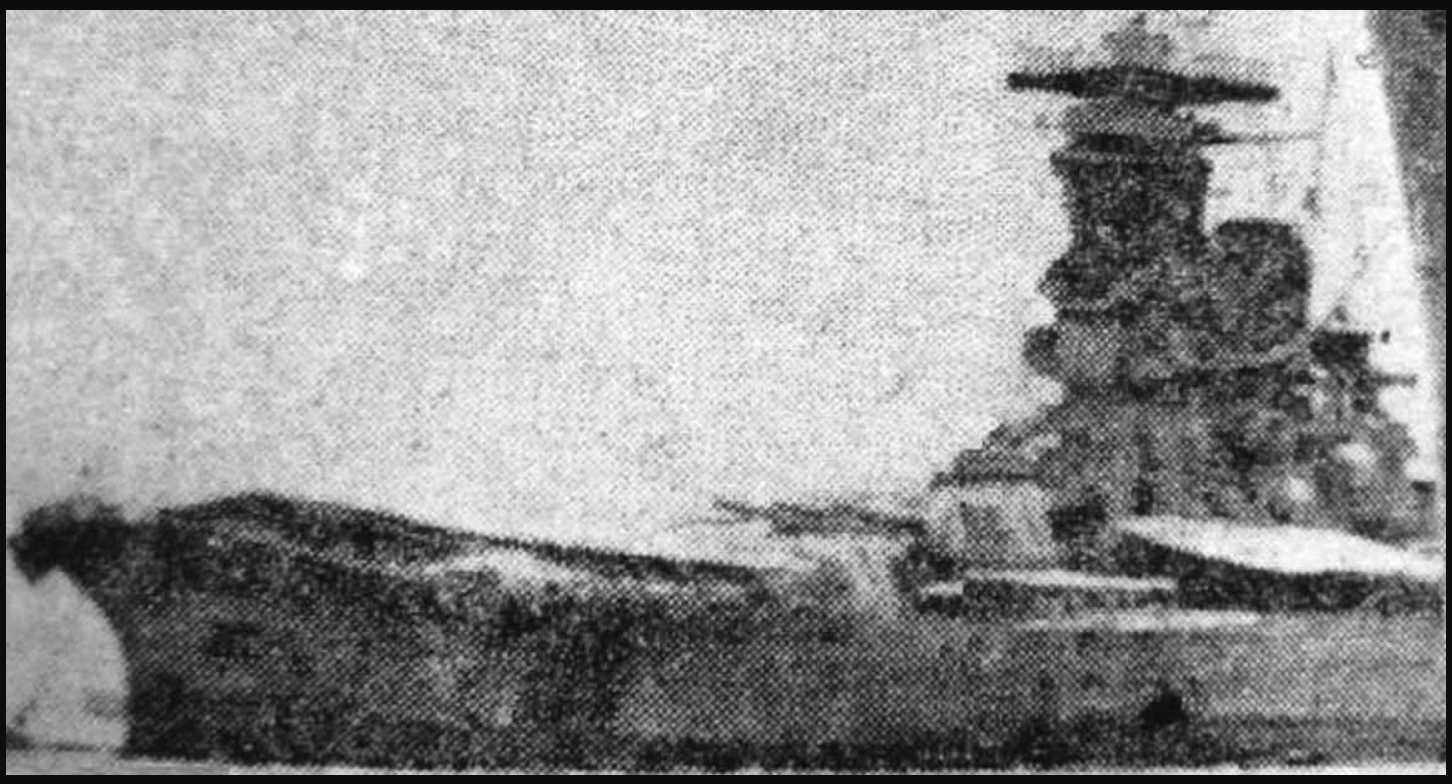
Christian van der Sanden writes: *“Late September 1942 – After installing a Type 21 Model 3 Air Search Radar on Musashi´s main 15m rangefinder. Photos were taken during tests of the new installed radar.”*



55. Features of Yamato & Musashi

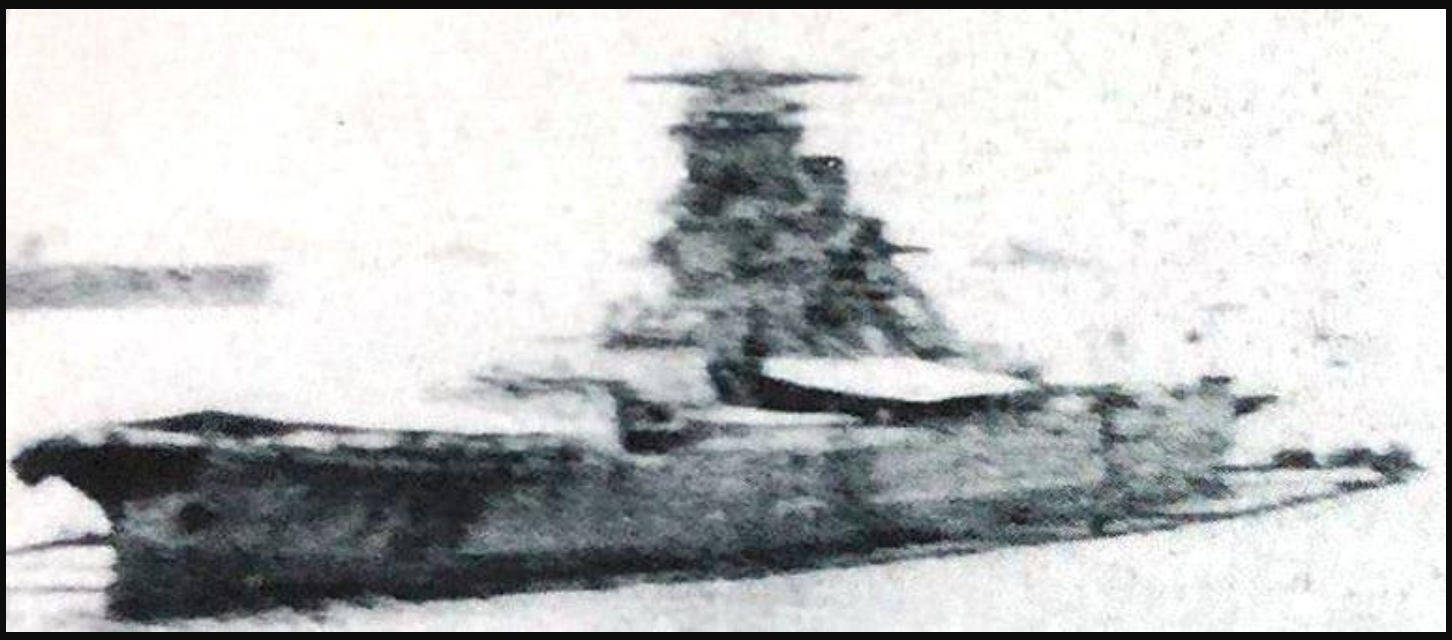
Another view of the radar mounted on the main fire director arms on top of the main tower of the superstructure.

Christian van der Sanden writes: *“Late September 1942 – After installing a Type 21 Model 3 Air Search Radar on Musashi´s main 15m rangefinder. Photos were taken during tests of the new installed radar.”*

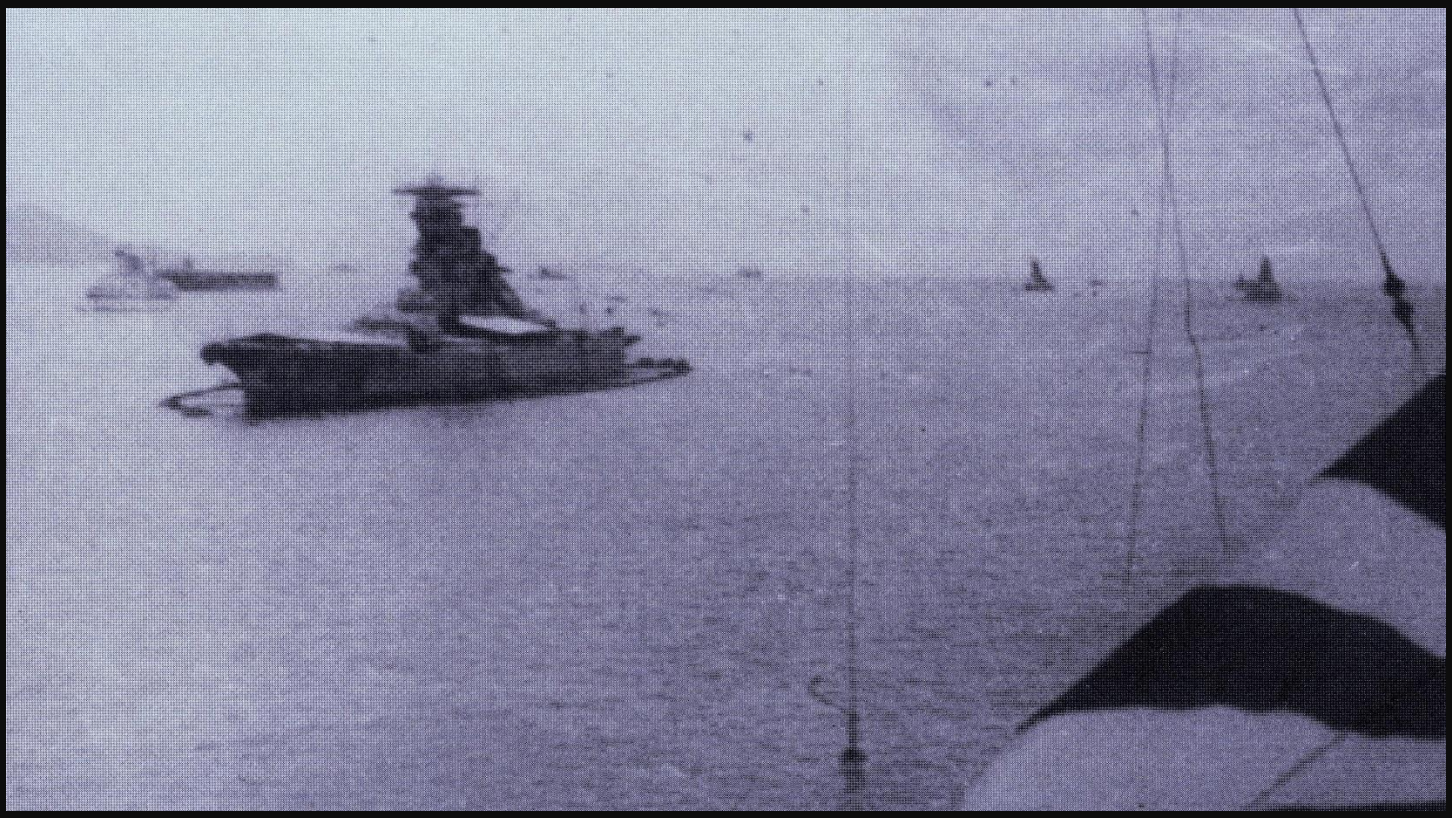


56. Features of Yamato & Musashi
Rare photo of Musashi at anchor after her radars were installed on top of the main tower's fire director arms in 1943 or 1944. Note the canvas awnings spread out on deck to shield sailors from the tropical sun while the ship is at anchor.

Christian van der Sanden writes*: "Summer 1943 - Musashi at Truk."*



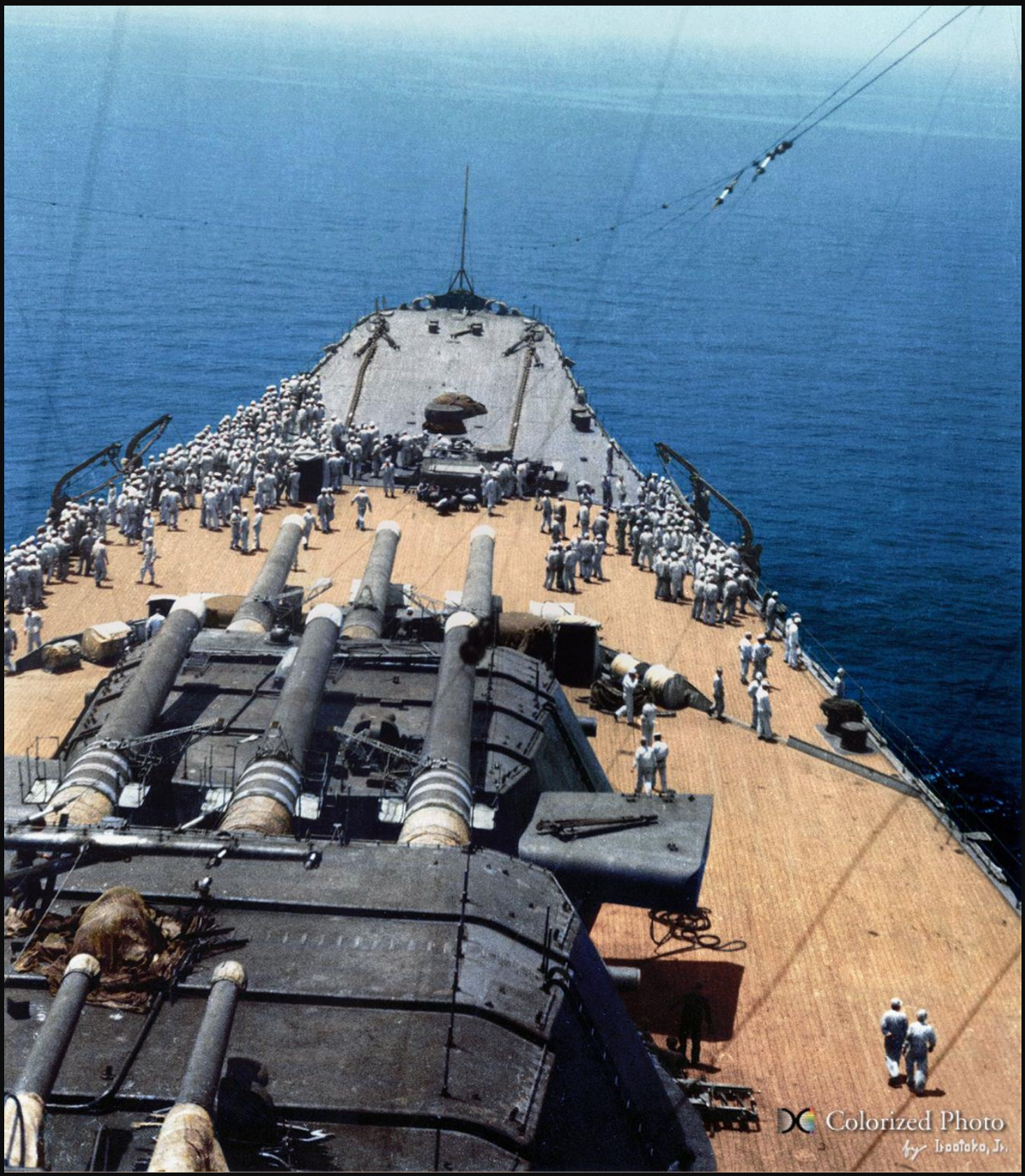
57. Features of Yamato & Musashi
Christian van der Sanden writes*: "Summer 1943 - Musashi at Truk."*



58. Features of Yamato & Musashi
Wider view of previous photo. Christian van der Sanden writes: “Summer 1943 - Musashi at Truk.”

59. Battleship Musashi - Main Tower

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.



60. Battleship Musashi - View from the Main Tower Forward

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942. Colorized photo courtesy of Irootoko_Jr.

61. Battleship Musashi - Foredeck

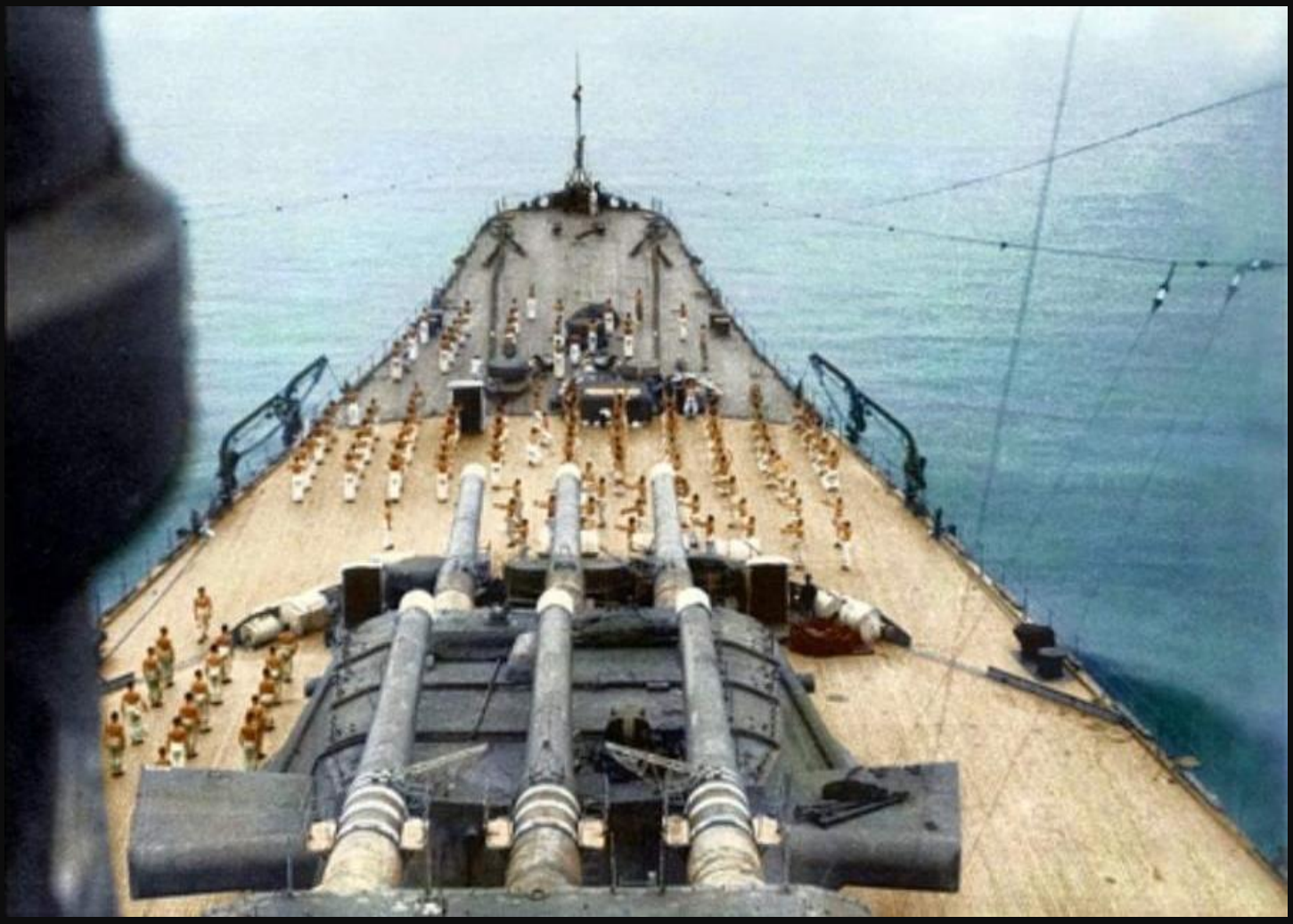
Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942. Colorized photo courtesy of Irootoko_Jr.

62. Musashi Forecastle Photo

Higher definition than the earlier colorized version of this photo. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

63. Battleship Musashi - Foredeck

Another photo taken near the same time as the earlier shot above. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

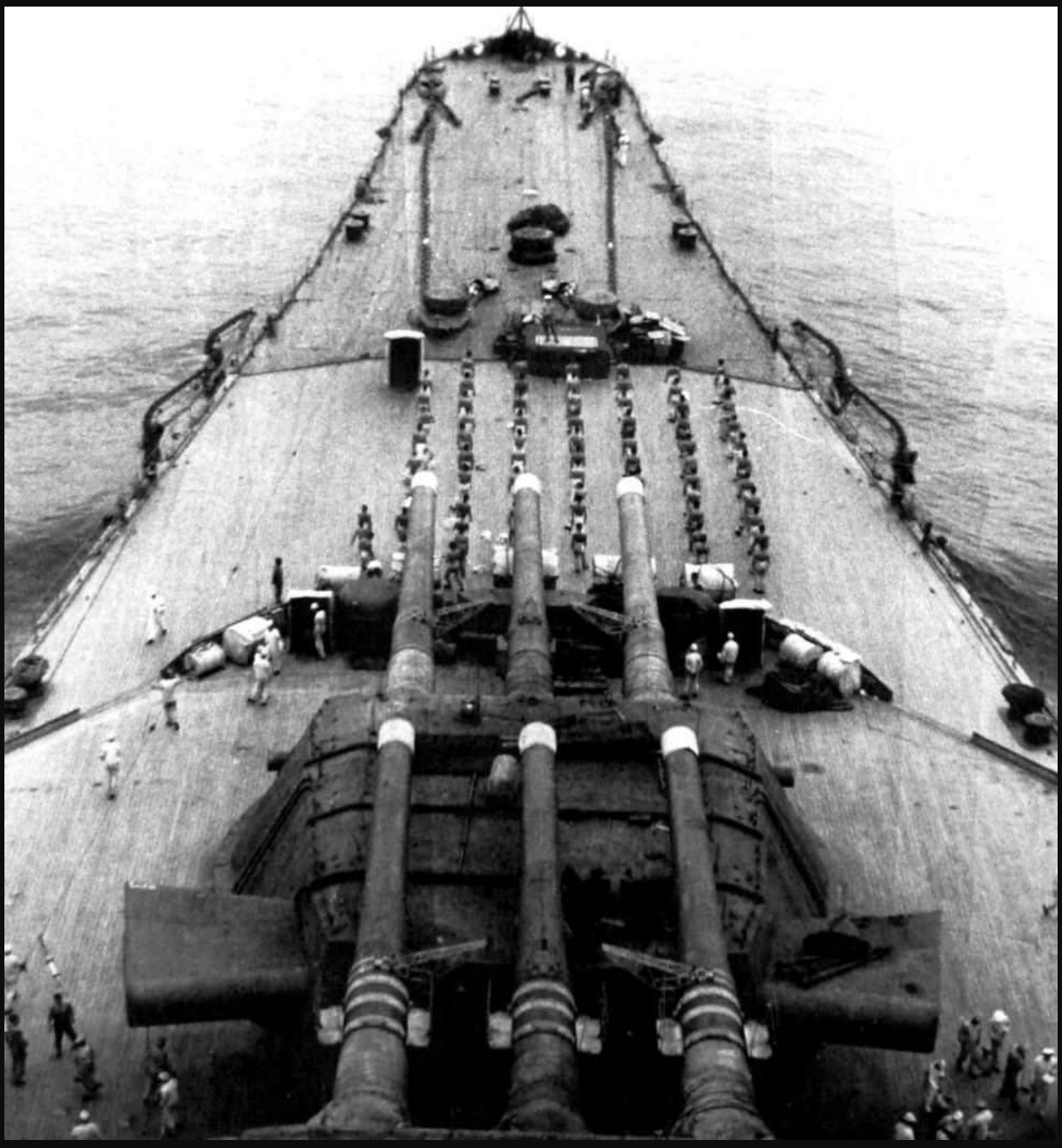


64. Battleship Musashi - View from the Main Tower Forward

Note the sailors drilling and exercising on the front deck. In the Imperial Navy, sailors would be mercilessly driven while the ships were in port, drilling endlessly, exercising to the point of exhaustion. Slacking off would be met with blows from an officer's fist, or several paddles across the rear with a wooden stick delivered with full force by a Non-Commissioned Officer.

As a result, Japanese sailors welcomed going out on battle missions, as these actually afforded them time to catch up on sleep and rest.

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942. Colorized photo courtesy of Irootoko Jr.



65. Features of Yamato & Musashi

Another shot of the crew exercising on Musashi's front deck. Note the crewmember directing the activity on top of the small platform just in front of the formation. Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

66. Details of Battleship Musashi

Christian Van Der Sanden writes that this photo was taken during Musashi´s trials in June-July 1942.

67. Features of Yamato & Musashi

A private snapshot taken of a sailor on one of the two great battleships. Many thanks to Doug Hallet of ModelWarships.com and the now-defunct SteelNavy.com who solved the mystery of the object behind the sailor:

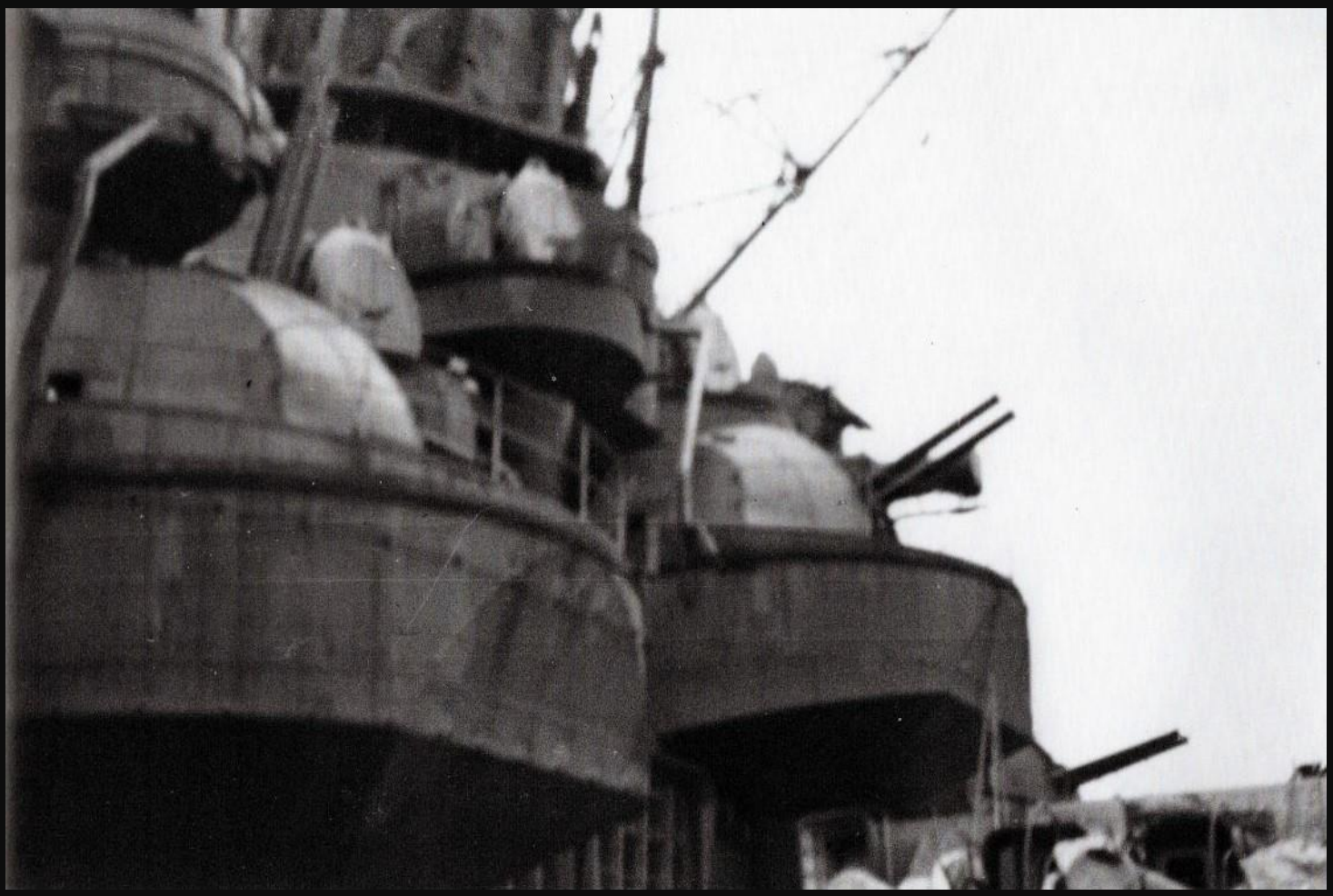
"The object behind the snapshot of the single man appears to be the Type 94 high angle range finder located on the main superstructure. You can see the side of the shield for one of the navigation lights on the lower left-hand side of the picture."

Christian van der Sanden adds: *" The photographer was inside the 25mm triple turret No. 1 Type B when this photo was taken. The left shutter was opened to take this photo. On the far right you can see the muzzle break of the left 25mm barrel. The sailor is standing on the roof top of 25mm triple turret No. 3 Type B. This photo was taken during Musashi´s trials in June-July 1942."*

68. Features of Yamato & Musashi

Musashi portside 12,7cm High Angle GunsTurrets 1. Photo provided by Christian Van Der Sanden who writes that this photo was taken during Musashi´s trials in June-July 1942. He adds:

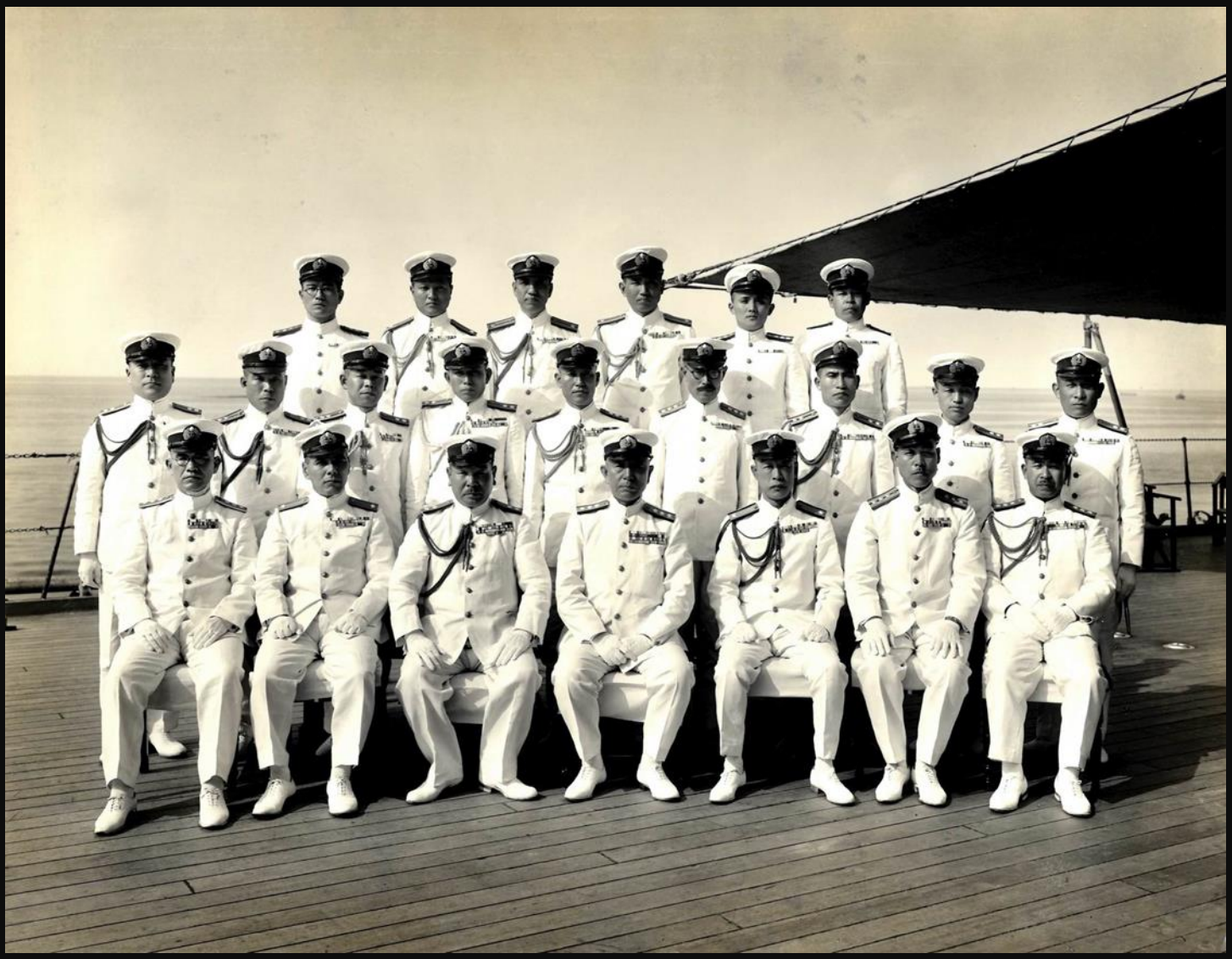
"All the onboard photos (19) taken during the trials between June and July 1942 were shot by Yasuro Horiuchi who was involved in the building of the Musashi."



69. Features of Yamato & Musashi

Musashi portside 12,7cm High Angle GunsTurrets 1. Photo provided by Christian Van Der Sanden who writes that this photo was taken during Musashi´s trials in June-July 1942. He adds:

"All the onboard photos (19) taken during the trials between June and July 1942 were shot by Yasuro Horiuchi who was involved in the building of the Musashi."



70. Musashi - Command Staff 1943 pose on her decks
Christian van der Sanden writes:

"June 24, 1943 - After comparing this photo with the famous 'Emperor Hirohito photo' (Photo 31/32, it appears that) this photo was taken the same day.. All Staff member are on both photos and with the exact same formal suits... This photo was taken on Musashi´s starboard side next to the main bridge structure."

71. Battleship Musashi Bridge
A rare photo taken on one of the Bridges of Musashi.

Christian van der Sanden writes:

"June 24, 1943 – Emperor Hirohito peered into a device near the Type 90 Compass. To the Emperor´s right is Admiral Mineichi Koga and Staff Officer Lieutenant Commander Kazuo Doi on Musashi´s main bridge."

72. Commander of the Combined Fleet, Admiral Yamamoto Isoroku
Admiral Yamamoto's HQ was initially on the Yamato in 1941-42, and was transferred to the Musashi in 1943 after her completion in the Summer of 1942.

Yamamoto was the Number 1 graduate in his Naval Academy graduating class. He spoke English and was an exchange officer in the United States in the 1920s. He had a far keener awareness of America's industrial capacity and its people's steadfastness and will than most Japanese.

Therefore he was not in favor of a war with the United States; however, once the decision had been made, he set to work planning the daring attack on Pearl Harbor.

Through historical happenstance, the attack outraged the American people due to its being a "sneak attack".

It was the Japanese intention to break off negotiations and diplomatic relations with the US one hour before the bombs started falling. Unfortunately, the document that the Japanese Ambassador in Washington was to deliver to the Secretary of State on Sunday morning took the embassy too long to translate and type from Japanese to English.

Thus, the Japanese envoys came to deliver it - several hours too late.

President Roosevelt knew that war with Japan was pretty much inevitable since the US imposed an oil and steel embargo on Japan earlier in 1941 over Japan's continuing war on China and its occupation of French Indochina (Viet Nam). The Japanese, almost totally dependent on US oil and also on US iron and steel imports, considered this tantamount to an act of war – which was not an unreasonable conclusion. It meant they would have to invade Indonesia to get oil for their nation, which would inevitably bring them into conflict with the UK and the USA. Whether provoking Japan into war was intended as a "backdoor" way of getting into the European conflict has never been conclusively answered, but that was the effect it ultimately had.

Though war seemed inevitable by December 1941, Roosevelt and the US Navy expected the Japanese to attack the US possessions in the Philippines, not the bases at Pearl Harbor.

Roosevelt wanted to get into the European war in order to save Western Europe from Hitler – but US public opinion prevented him from doing it. Once Japan attacked the US however, Hitler foolishly declared war on the US, and Europe immediately became the central priority for the US war effort, with the Pacific War second. The US defeated Japan in the Pacific devoting only about 1/3 of its total war effort there. 2/3 went to the European Theater.

Admiral Yamamoto is famously quoted as having said privately that *"I fear we have awakened a sleeping giant and filled him with a terrible resolve"* following the attack on Pearl Harbor.

The quote is apocryphal - there is no evidence that Yamamoto ever actually said it. What he did tell the Naval Chief of Staff was that after Pearl Harbor he could *"run wild"* in the Pacific for 6 months, but that after that *"I have no confidence in success."* The gamble was that the United States, having had its nose bloodied, would sue for a peace agreement by then. It was a miscalculation of fatal proportions, every bit as disastrous as Hitler's decision to invade the Soviet Union.

"Starting a war is like stepping into a dark room" is a quote often attributed to Hitler. If he said it, it almost certainly dates to some time after Operation Barbarossa bogged down in the endless steppes of the Soviet Union. It is also one of the truest warnings ever given against beginning a war.

Yamamoto's 6-month prediction proved to be prophetic - almost exactly 6 months to the day after Pearl Harbor, on June 5, 1942, 4 of the 6 Japanese fleet aircraft carriers were sunk in an ambush attack by USN planes at the Battle of Midway, turning the tide in the Pacific War and putting Japan in the unenviable position of having to fight a war of attrition against an enemy with vastly greater resources, population, and soon enough, superior technology as well.

I recommend Anthony Tully's definitive account of the Battle of Midway, "Shattered Sword", to anyone wanting to find out exactly what happened in the run up to, and during, that tide-turning battle. The link to get your own copy from Amazon is on the "Links" page.

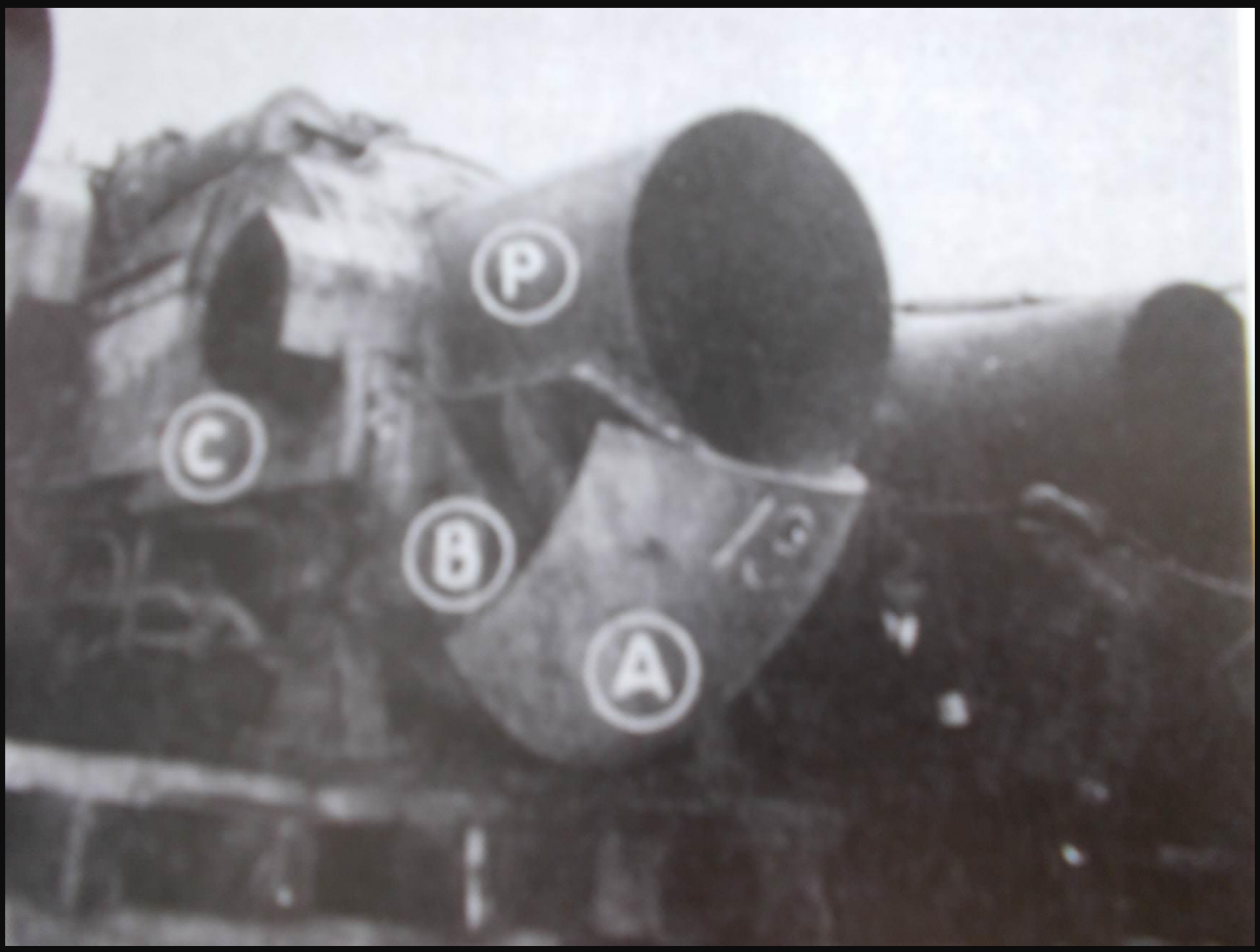
73. Admiral Yamamoto' ashes on board Musashi, 1943.

It fell to Musashi to bring the Admiral's ashes back home to Japan following his death in the mid-air ambush of his plane over Rabaul by American P-38 Lightnings in 1943 (a feat made possible by the cracking of Japanese codes.) FDR personally gave the order to kill Yamamoto when the latter's South Pacific inspection tour of Japanese bases became known to the USN intelligence.

74. Aircraft Carrier Shinano

Shinano was to be the third Yamato-class battleship, but was converted mid-way through her construction when it became obvious in 1942 that Japan needed aircraft carriers. Because of her initial design as a battleship, she was envisioned as more of an "aircraft tender" - able to ferry large numbers of planes and pilots out to the smaller, faster

carriers of the fleet. She was torpedoed by the USS Archerfish while on her way to her final outfitting in the port of Kure late in 1944, and sank after about 18 hours. Her Captain mistakenly thought that the damage was manageable, so instead of turning back to nearby Tokyo Harbor, he tried to make the voyage. But her damage control crews were too inexperienced and her flood control compartments unfinished. The infiltration of water could not be stemmed.

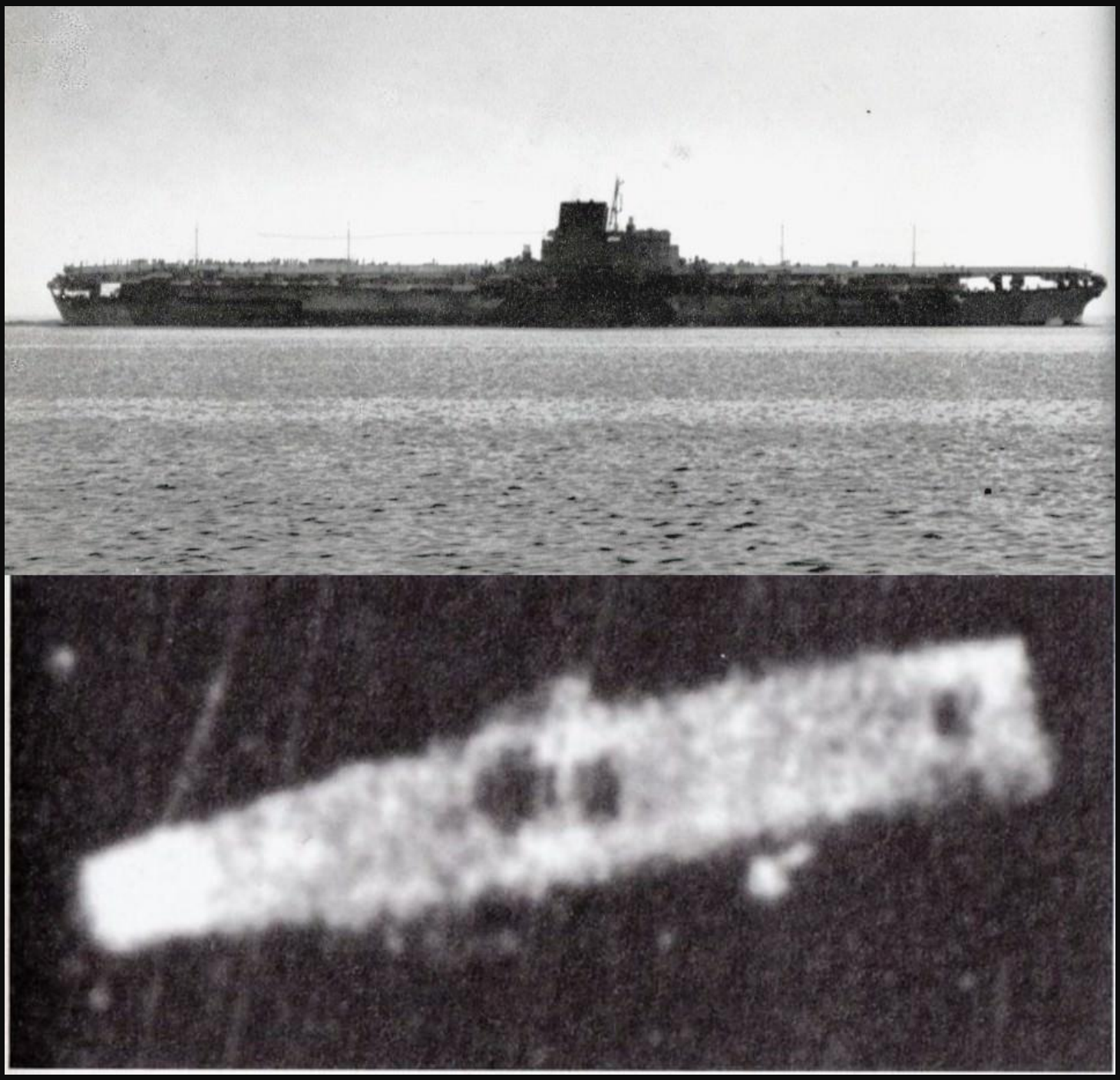


75. Aircraft Carrier Shinano Gun Base

Main turret gun base for one of Shinano's 18" turrets, removed for the conversion to an aircraft carrier or never installed, that was found by US forces in Japan after the war ended.

Christian van der Sanden writes:

"After the war – The Kamegakubi Firing Range (Proving Ground) was inspected by the U.S. Naval Technology Mission. A lot of photos were taken and published in their Report O-45."

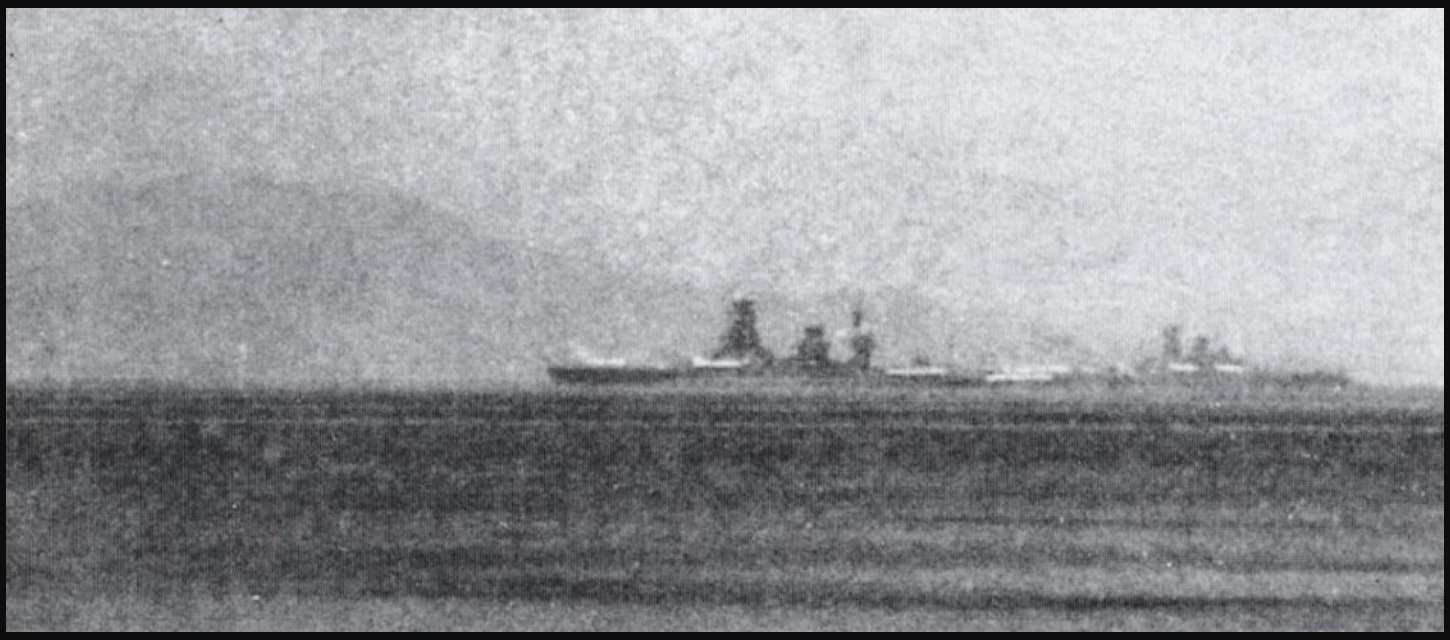


76. Aircraft Carrier Shinano

Another view of the earlier photo and an aerial surveillance B-29 photo of Shinano (detail of much larger photo).

Christian van der Sanden writes of the observation photo*:*

"November 1, 1944 – The Shinano moored at buoy No. 3 off the coast of Yokosuka Naval Base."



77. Yamato on R at Hashirajima Jun 25 1942
Yamato on R at Hashirajima Jun 25 1942. Photo provided by Christian Van Der Sanden in 2024.

78. Yamato at Truk in 1942
Newly ID's photo of Yamato (2024). Thanks to Christian van der Sanden for providing additional information.

79. Kate Bombers fly over Yamato at Hashirajima, Summer 1943.
Thanks to Christian van der Sanden for providing additional information about this photo. Note canvas awnings spread out to shield the crew from the Tropical sun, as well as small supply ships. Colorized photo courtesy of Irootoko Jr.

80. Yamato or Musashi at anchor
Taken during the war, probably '42-43 time frame. Ship ID is uncertain. Thanks to Christian van der Sanden for providing additional information about this photo.

81. Yamato or Musashi at anchor
Full version of previous photo, taken from the deck of Heavy Cruiser Atago. Thanks to Christian van der Sanden for providing additional information about this photo. He adds: *"Probably Truk in 1942-43."*

82. Yamato Entering Truk Harbor, 1943
Note the deck details (particularly the rear crane and flight deck, with one aircraft dolly clearly visible. A splotch on the negative partly blocks the view of the flight catapult). Note the crew lined up on decks. Also note weathering alongside the hull. It just may be one of the most informative and valuable Yamato photos in existence. Zoom in for detail.

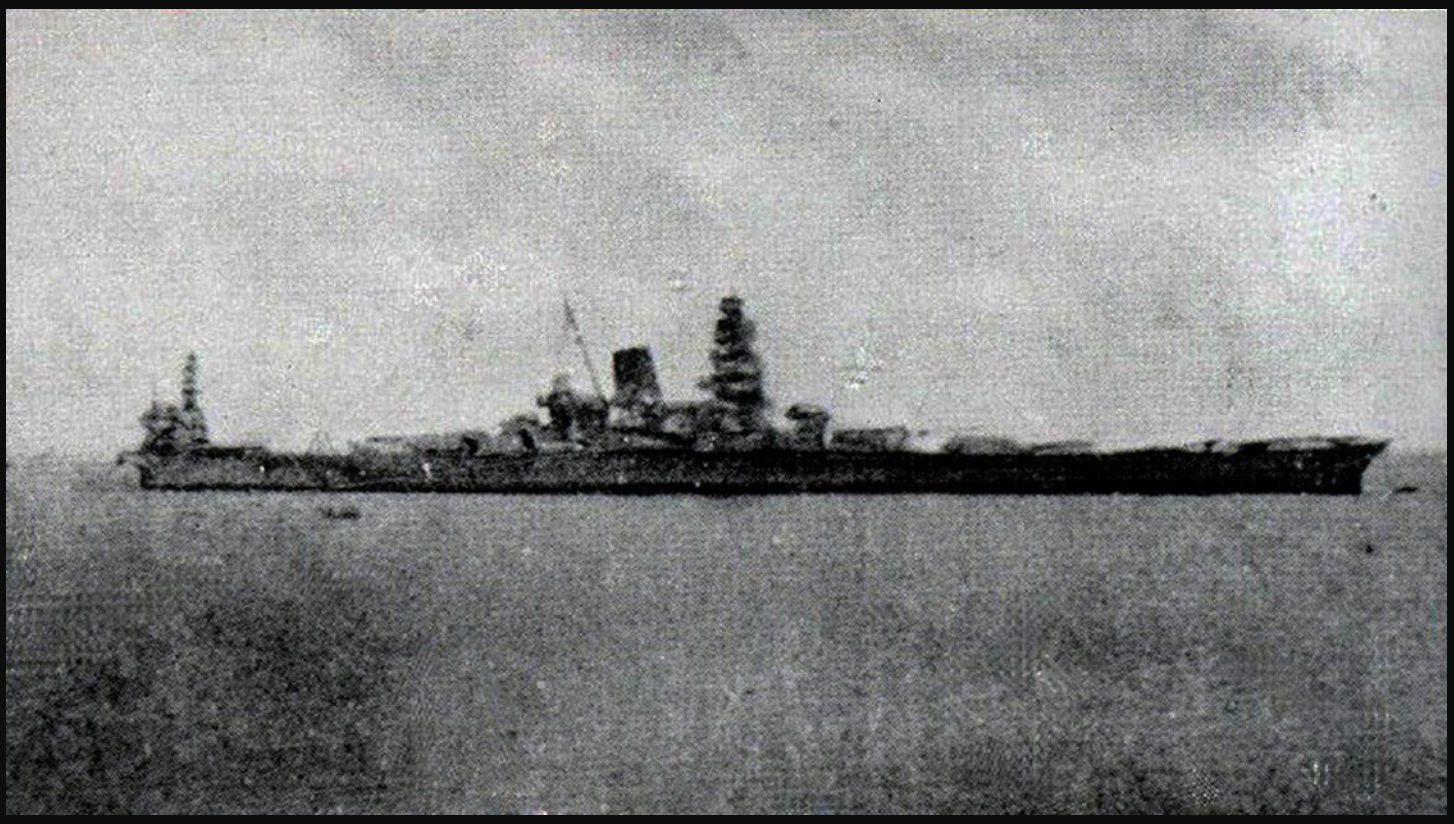
Many thanks to Doug Hallet of Modelwarships.com and the now-defunct SteelNavy.com who sent the following note:

"The ship appears to be entering port. The anchors are up and the flag is not flying from the stern/bow. There is some wake along the waterline. The casual scattering and increased presence of crewmen would suggest to me that they are

taking in the sights as the ship heads for its assigned anchor spot. This would probably explain why the occasion grabbed someone's attention enough to take a snapshot from one of the other ships."

Christian van der Sanden adds: *"September 4, 1942 – Yamato weighed anchor from Harushima No. 2 Anchorage, Truk Island, and shifted anchor to Natsushima No. 1 Anchorage south of the Island."*

Please zoom in as this photo is Hi Res with TONS of detail. I worked for several days to clean it up and digitally enhance it. I spliced it together from three separate partial scans of the single large original image.



83. Musashi in 1943
Thanks to Christian van der Sanden for providing additional information about this photo.

84. Yamato on the way from Truk to Kure in 1943
Yamato on the way from Truk to Kure on May 8th 1943. Note that her float planes appear to be atop dollies on the rails of the rear flight deck. Thanks to Christian van der Sanden for providing additional information about this photo.

85. Yamato on the way from Truk to Kure in 1943
Yamato on the way from Truk to Kure on May 8th 1943. A wider view of the earlier photo. Note the “flattop” visible at L.

86. Yamato, Nagato & Fuso 1943
Recently unearthed photo found in the album of an IJN sailor. Yamato (front), Nagato (behind), and Fuso (rear) as seen from Musashi, 17 October 1943.

87. Yamato, Nagato & Fuso 1943
Recently unearthed photo found in the album of an IJN sailor. Yamato (front), Nagato (behind), and Fuso (rear) as seen from Musashi, 17 October 1943. Taken just after above photo. This photo was provided by Christian Van Der Sanden.

88. Yamato, Nagato & Fuso 1943
Recently unearthed photo found in the album of an IJN sailor. Yamato (front), Nagato (behind), and Fuso (rear) as seen from Musashi, 17 October 1943.

89. Yamato, Nagato & Fuso 1943

Colorized wider view of previous photo posted on FB IJN Navy Page by Tachihito Fukui. Note that the rear deck of Musashi is visible on the lower left of the photo.

Tachihito Fukui describes the photo: *"Battleships Yamato Nagato and Fuso undergoing training at Truk Atoll seen from the battleship Musashi."*

90. Yamato and Musashi at Truk, 1944
Note the canvas awnings spread out above decks to provide shade from the Tropical sun.

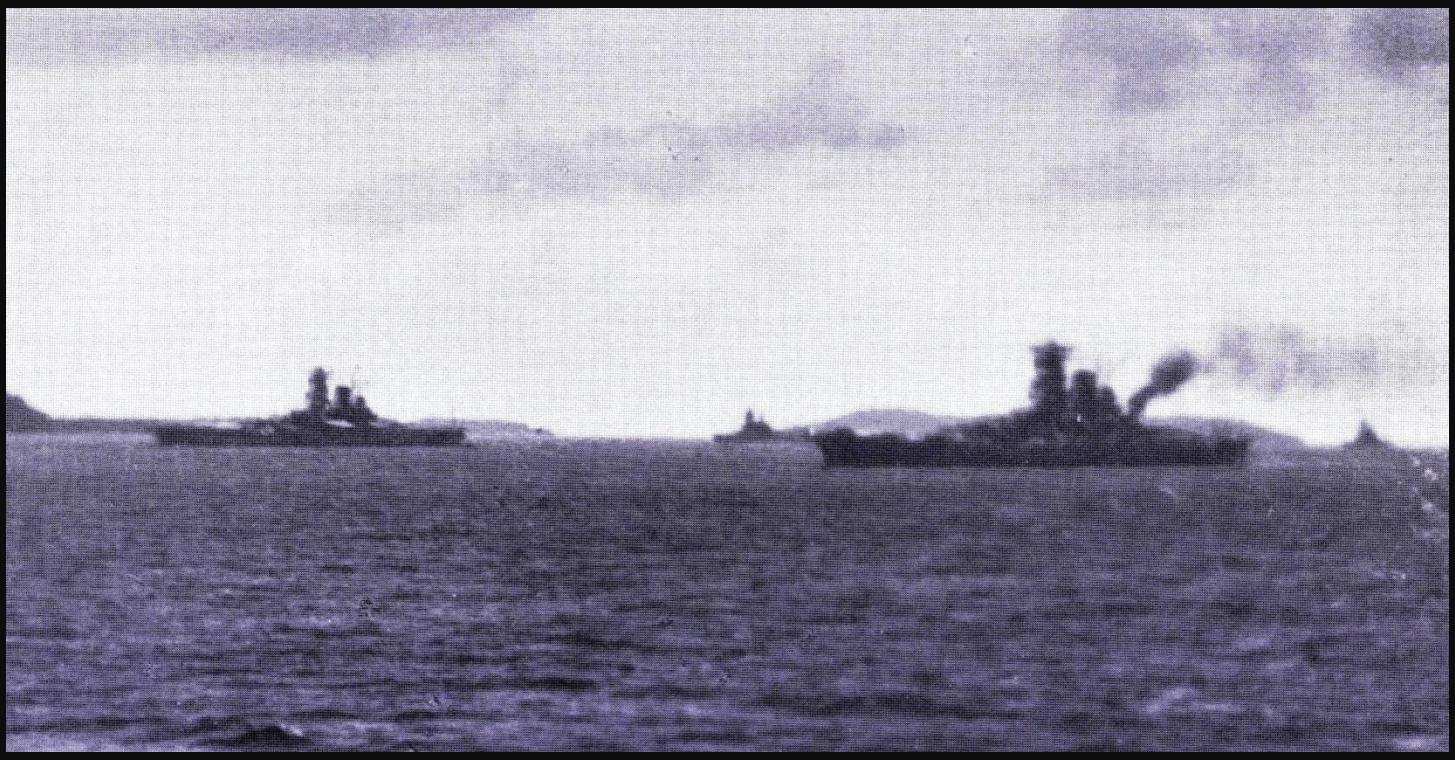
Christian van der Sanden writes: “Early 1943 – Yamato was still „sitting“ at Truk since August 28, 1942. Musashi arrived at Truk at January 22, 1943. On February 11, 1943 Musashi becomes the new flagship of the Combined Fleet. Yamato leaves Truk on May 8, 1943. So these two photos were taken between January 22 and May 8, 1943.”

Colorized photo courtesy of Irootoko Jr.

91. Musashi at Truk, 1944
Close up of prior photo showing Musashi. Thanks to Christian van der Sanden for providing additional information about this photo. Colorized photo courtesy of Irootoko Jr.

92. Yamato and Musashi at Truk, 1944
Full sized colorized photo courtesy of Irootoko Jr.

93. Yamato and Musashi at Truk, 1944
Second photo taken around the same time as the previous photo.



94. Musashi and Yamato at Truk

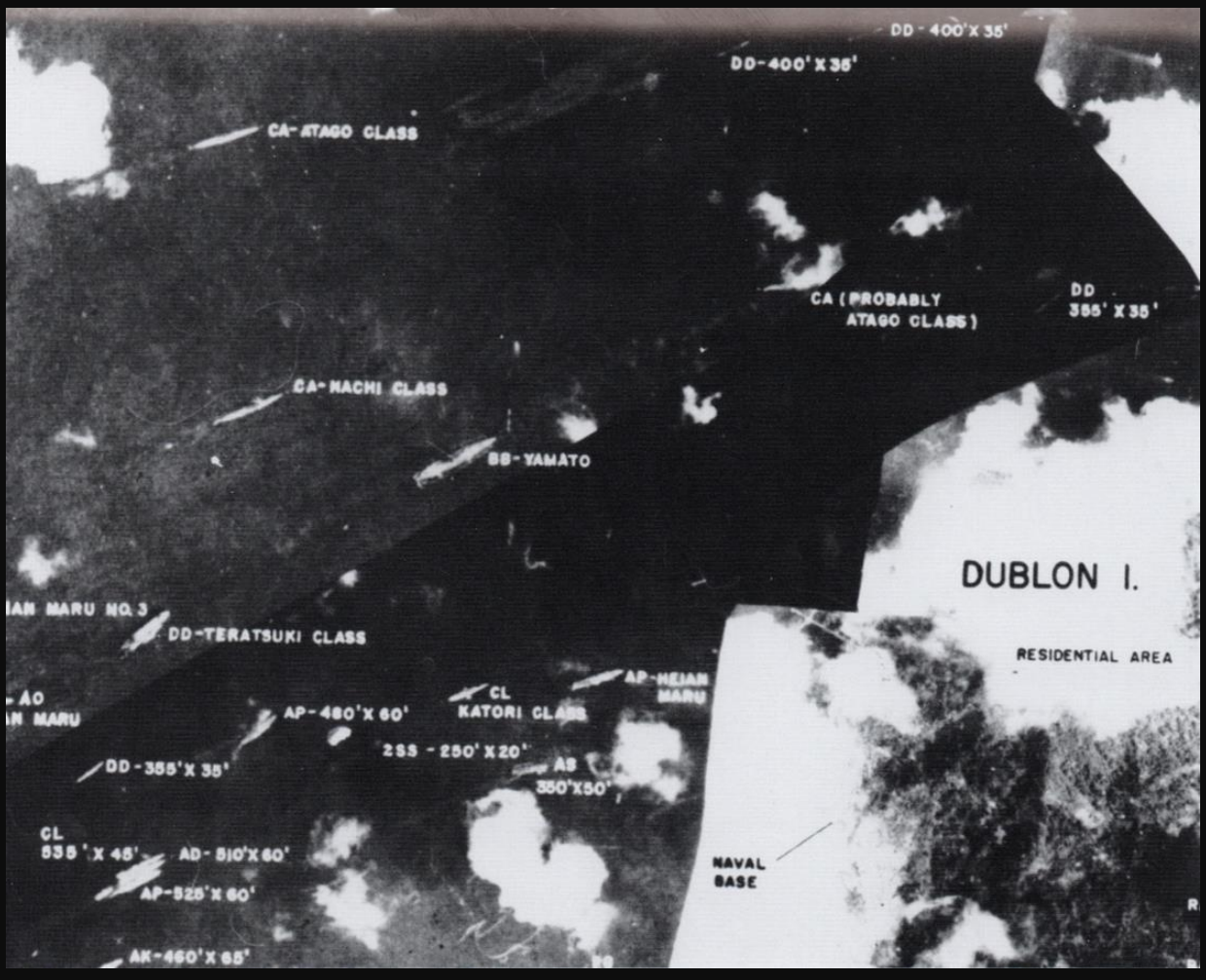
Christian van der Sanden writes: *"Photo was taken probably at the same time period as on the above photos at Truk."*

95. Yamato & Cruiser Chokai at Truk

Yamato can be seen just off Chokai's stern.

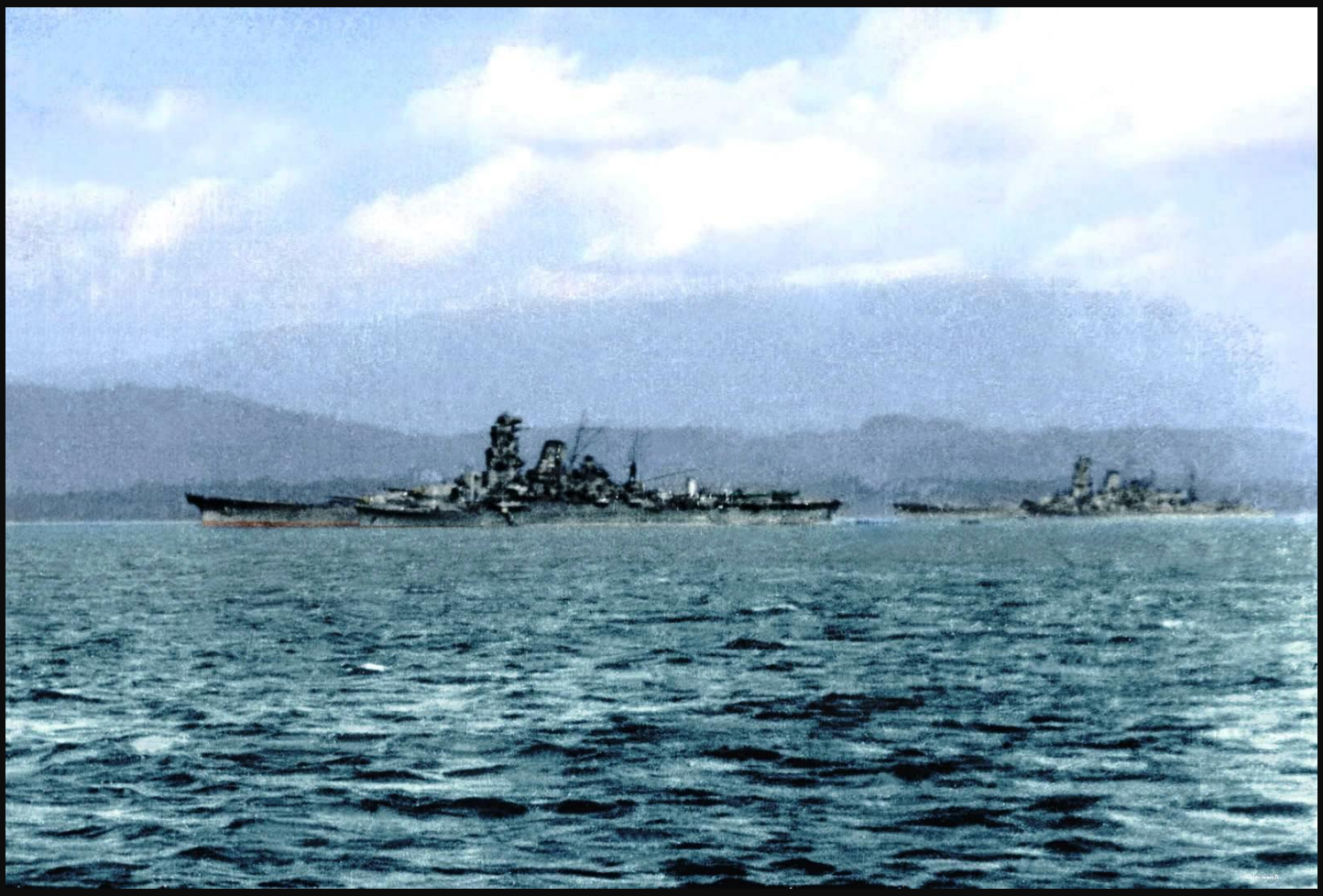
96. YAMATO, MUSASHI, NAGATO AT BRUNEI, OCT 1944, PRIOR TO OPERATION SHO-GO

Thanks to Christian Van Der Sanden for providing the date and place.



97. Musashi February 4th 1944 at Truk

New photo provided by Christian Van Der Sanden in 2024. The ID of the battleship appears to refer to a Yamato Class battleship rather than identifying a specific ship.



98. Musashi & Yamato at Brunei, 1944
Christian van der Sanden writes: *"October 1944 – Brunei October 1944. Musashi (center) with the heavy Cruiser Mogami in front of her and Yamato in the right background."*

Colorized photo courtesy of Irootoko Jr.

99. Van Force C en route to Philippine Sea June 17, 1944
Photo released Summer 2024 by the Kure Yamato Museum. Battleship Yamato can be seen at the rear of the formation on the R side of the photo.

100. Yammato during the Battle of the Philippine Sea June 19-20, 1944

This battle went down in USN lore as “The Great Mariana’s Turkey Shoot”, due to the overwhelming losses suffered by Japanese aircraft – over 600 destroyed – compared to minimal American losses. In this photo we can see by the flak visible in the air that the group is under USN air attack. The explosion visible to the front of Yamato in the distance is a bomb hit on the aircraft carrier Chiyoda, which would survive this battle only to be lost several months later at Leyte Gulf.

101. The Fleet Leaving Brunei for the Battle of Leyte Gulf, October 1944
October, 1944. "Center Force", composed of about 40 ships leaves Brunei heading for the Philippines to attack the American invasion force. Battleship Nagato is at right, with Musashi and Yamato just ahead of it. About 40 ships of "Center Force" would depart this day.

In the coming days the Imperial Japanese Navy would lose, in combat stretching across the Sibuyan Sea and Leyte Gulf, all 4 remaining operational aircraft carriers, more than 400 planes, 3 battleships, 8 cruisers and 9 destroyers.

As a cohesive fighting force the Imperial Navy ceases to exist in October 1944.

Only Yamato, cruiser Yahagi, and 8 destroyers remained operational to take part in the suicidal "Operation Ten'ichigo" against Okinawa 6 months later in April 1945.

Yoshida notes that the name of this final special strike force sortie, translated roughly as "Operation Heaven Number 1" ('Ten' meaning 'Heaven"), probably came from a saying "A Heaven-sent opportunity to reverse one's fortunes".

102. Battleship Musashi Leaving Brunei, October 22 1944
Contrast this photo with the later photo of the sinking Musashi, taken from virtually the same angle.
Colorized photo courtesy of Irootoko Jr.

103. Battle of Leyte Gulf
Yamato, Musashi, Nagato and Haguro (from left to right) October 24th 1944. Photo provided by Christian Van Der Sanden in 2024.

104. Battle of Leyte Gulf
USN Recon photo of Center Force entering Sibuyan Sea, Oct 24 1944.

105. Battle of Leyte Gulf
USN Recon photo of Center Force entering Sibuyan Sea, Oct 24 1944. A Yamato class battleship visible at center.

106. Battle of Leyte Gulf
Another view of Yamato, left, and Musashi, right, leaving Brunei October 22, 1944. Thanks to Christian Van Der Sanden for providing the date and place.

107. Battle of Leyte Gulf October 1944
Yamato or Musashi at Leyte Gulf October 1944. Photo provided by Christian Van Der Sanden in 2024.

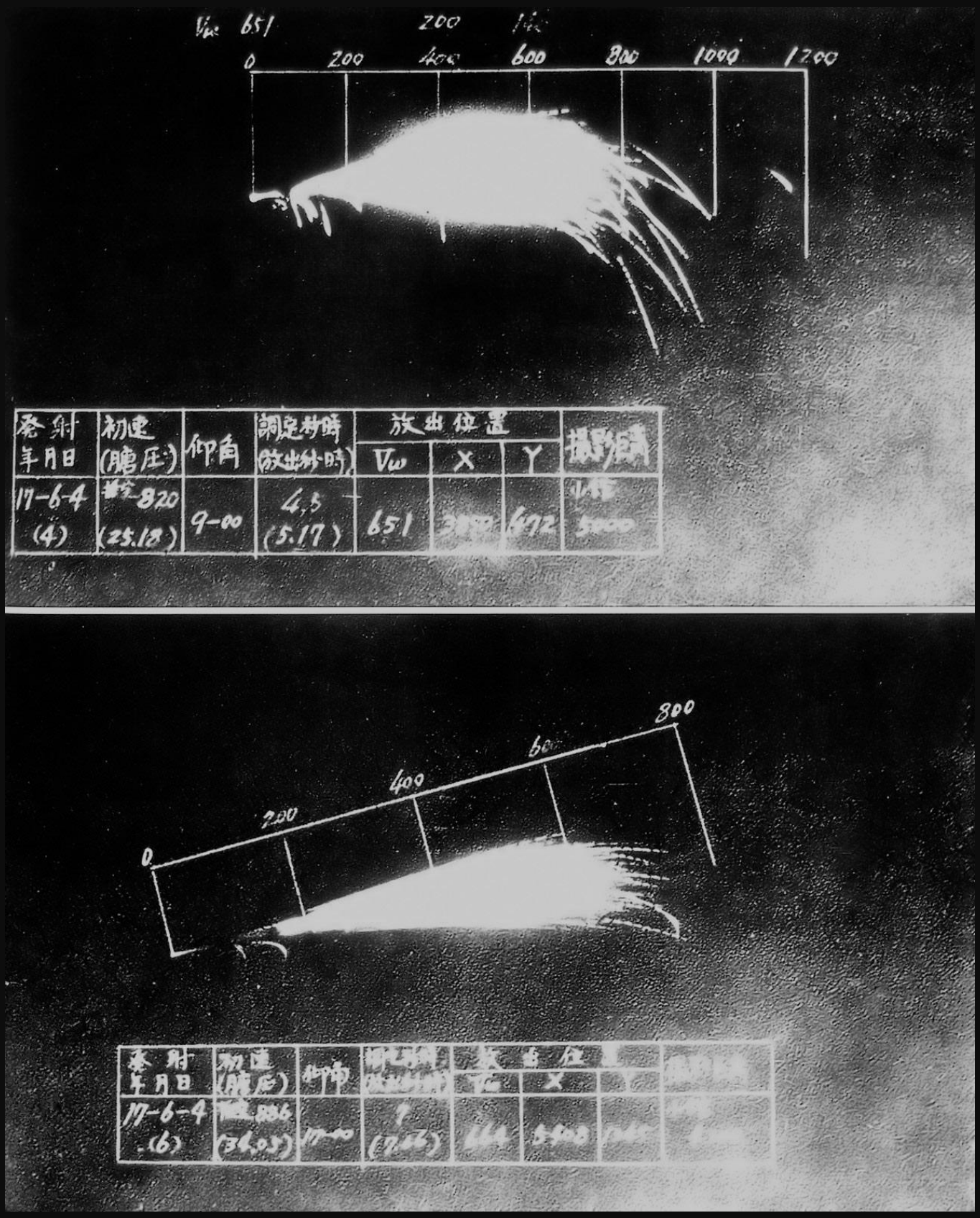
108. Battle of Leyte Gulf and Japanese special AA shells
This photo captures Yamato (center of photo) and other ships of Center Force firing the "Sanshikidan" or "Beehive" shrapnel AA shells specially manufactured to be used against airplanes. Equipped with a timed fuse that was set prior to firing, these shells would explode spraying a type of shrapnel (in the case of Yamato and Musashi's 18" shells, up to a distance of a kilometer from the point of detonation), which could bring down any planes within the kill zone.

The large blast with trailing smoke may be Yamato's 18" guns; the smaller blasts to the right of the photo are likely from the 5" or 6" batteries of Yamato or the other ships visible below.

Christian van der Sanden writes:

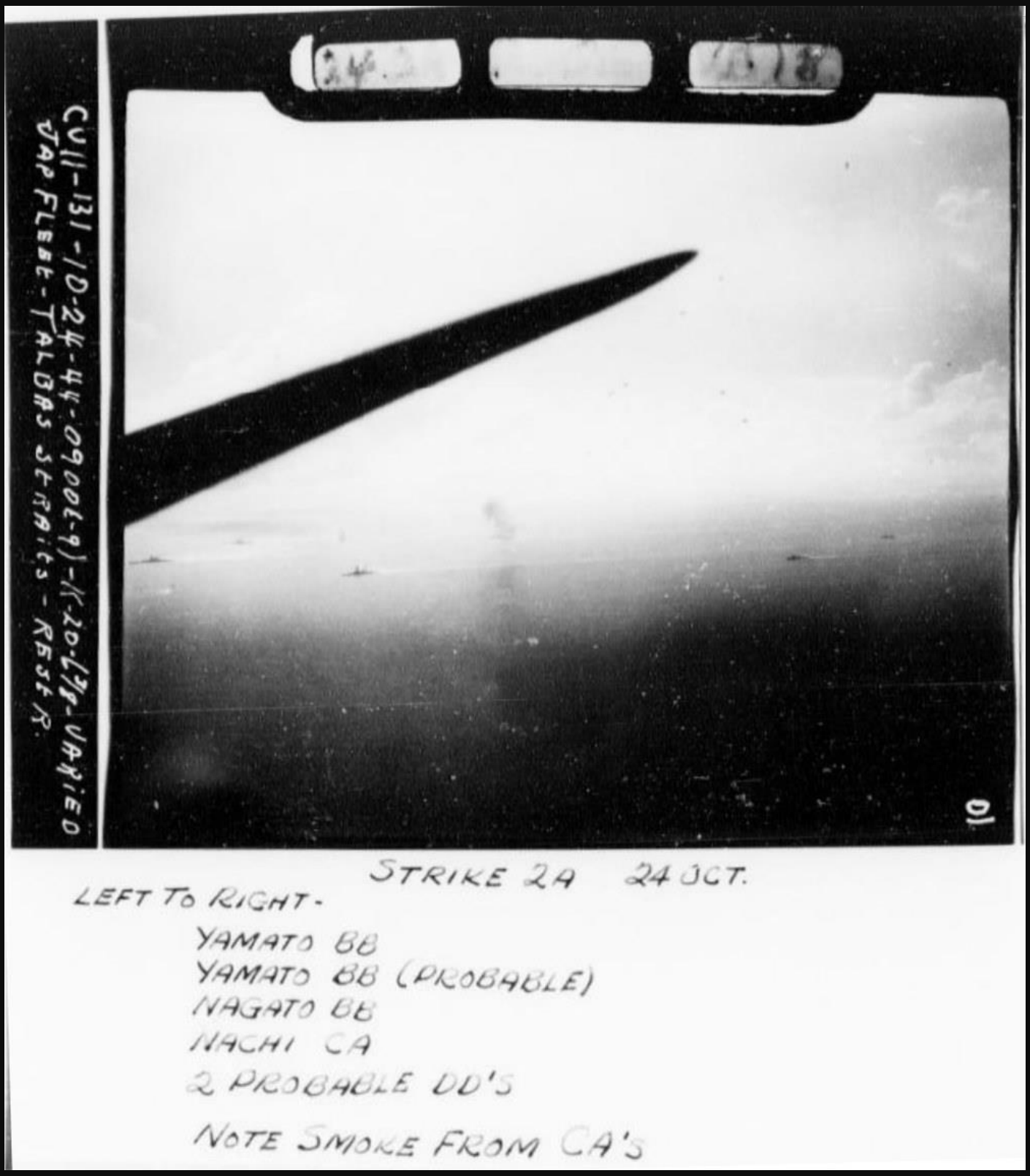
"November 16, 1944 – B-24 and P38 aircraft attacking the remains of the IJN after the Battle at Leyte at Brunei Bay. Yamato at the center fired 10 salvos of Type 3 San Shiki Anti Aircraft Shells with her main guns at a distance of 20000

meters. Probably two B-24 were shot down. At 18:30 p.m. the next day, the remains of the fleet left Brunei Bay for the mainland."



109. IJN special AA shells (San-Shiki-Dan or "Beehive" shrapnel shells)

Military test photos illustrating their effective range. In practice, however, aiming was a problem. The fuses had to be set for a period of time from firing to detonation. As a practical matter, aiming them at fast moving planes and calculating the detonation times to explode within the effective range of the enemy proved difficult.



110. Battle of Leyte Gulf

Photo courtesy of Robert Lundgren He describes this photo:

“As the 2nd strike from Intrepid arrives over the Japanese fleet Yamato can be seen on the extreme left side of the photo with Nagato on her port quarter and Musashi on her starboard quarter and Haguro aft of Musashi.”

111. Battle of Leyte Gulf
Yamato – or Musashi, as well as other ships of Center Force make their familiar circles while dodging aerial bombs and torpedoes from USN planes.

Christian van der Sanden writes:

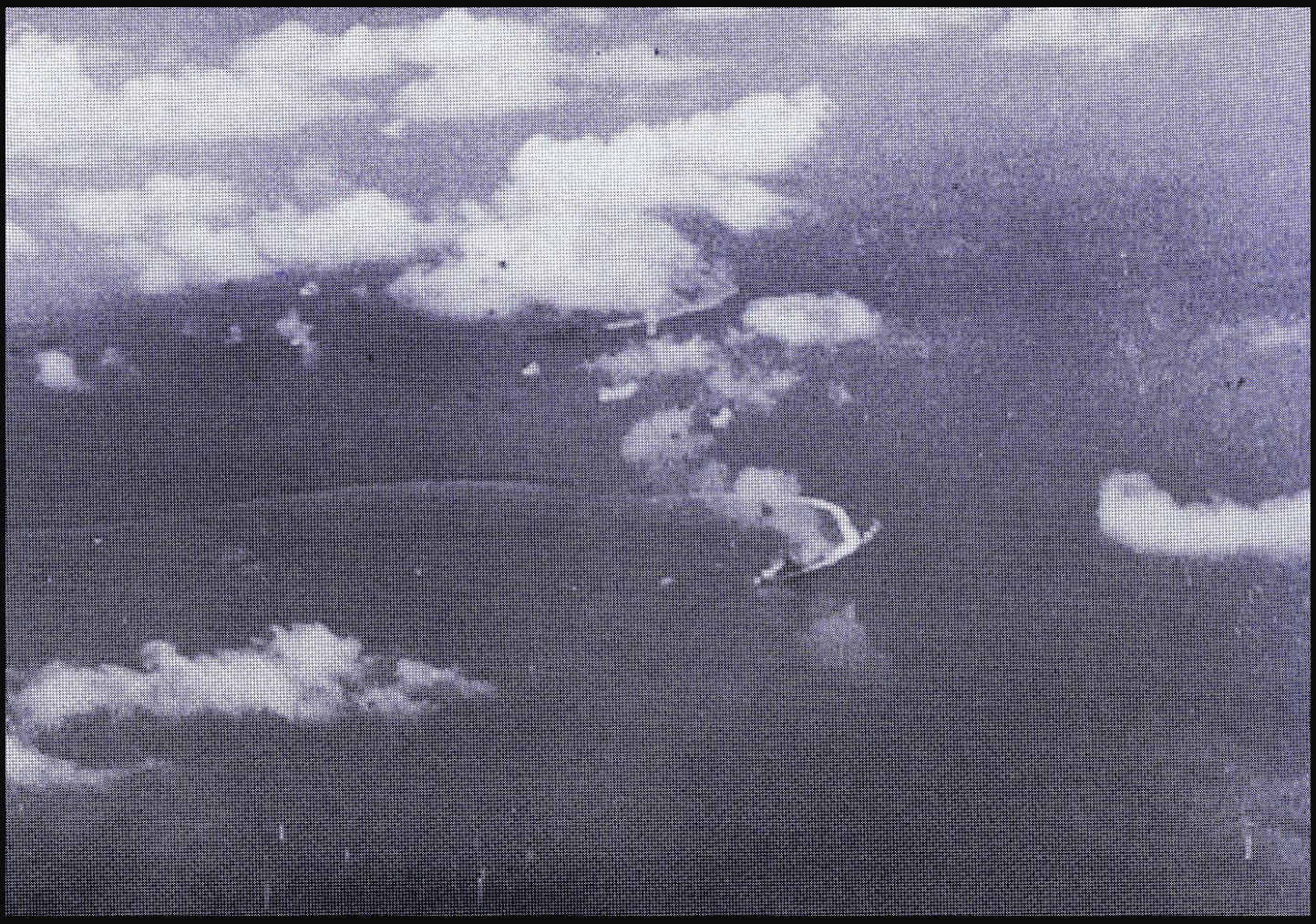
“Exact date unknown – I have checked the photo and came to the conclusion, that the ship which is mentioned as ‘Musashi’, can´t be correct (meaning the ship obscured by smoke at center R). By measuring the size compared with the ‘Yamato’ on this photo, the ship is too short to be Musashi. So the exact date (24th or 25th) is difficult to find. But it is possible too, that the clear visible Yamato Class ship is the Musashi.”

112. YAMATO (CENTER R OF PHOTO) TRAILS WHITE SMOKE FROM FIRING OF HER 18.1 RIFLES

She is firing her “Sanshikidan” shrapnel AA shells, the detonations of which – and the shrapnel trails – are visible.

113. Musashi Maneuvers to Avoid Attack
Note the flak visible in mid-air. Christian van der Sanden writes*:*

"October 24, 1944 – Musashi makes a sharp turn to her port side. The heavy cruiser Tone was attached to help Musashi. Probably a Kongo Class Battleship is visible at the lower center."



114. Yamato to Avoid Attack
Turning to avoid air attacks.

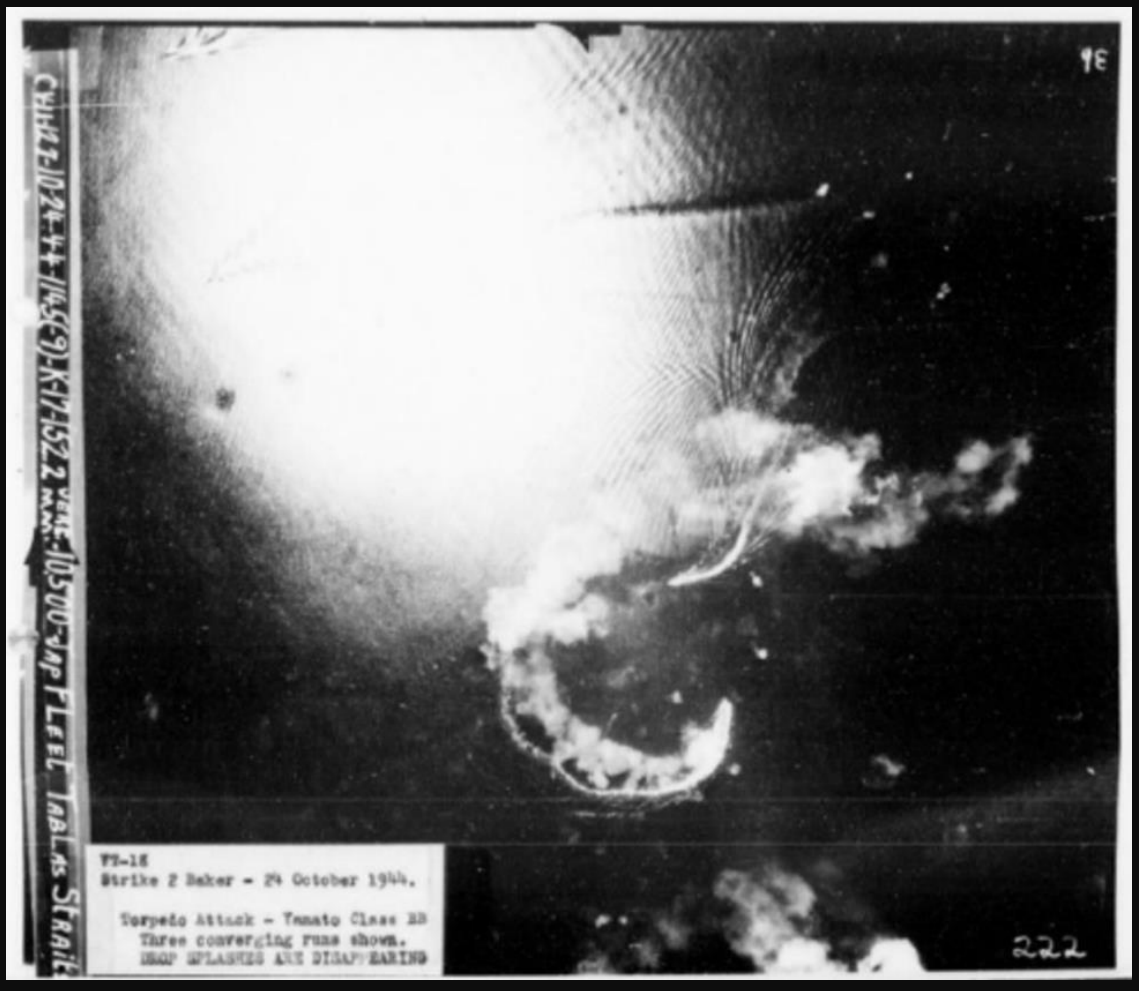
115. Battle of Leyte Gulf

Photo courtesy of Robert Lundgren. He describes this photo:

"Musashi in the lower left corner was making a hard turn to port. Two destroyers maneuvered to stay out of her way."

116. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
Robert Lundgren analyzes the first in a series of consecutive photos showing Musashi under USN torpedo attack:

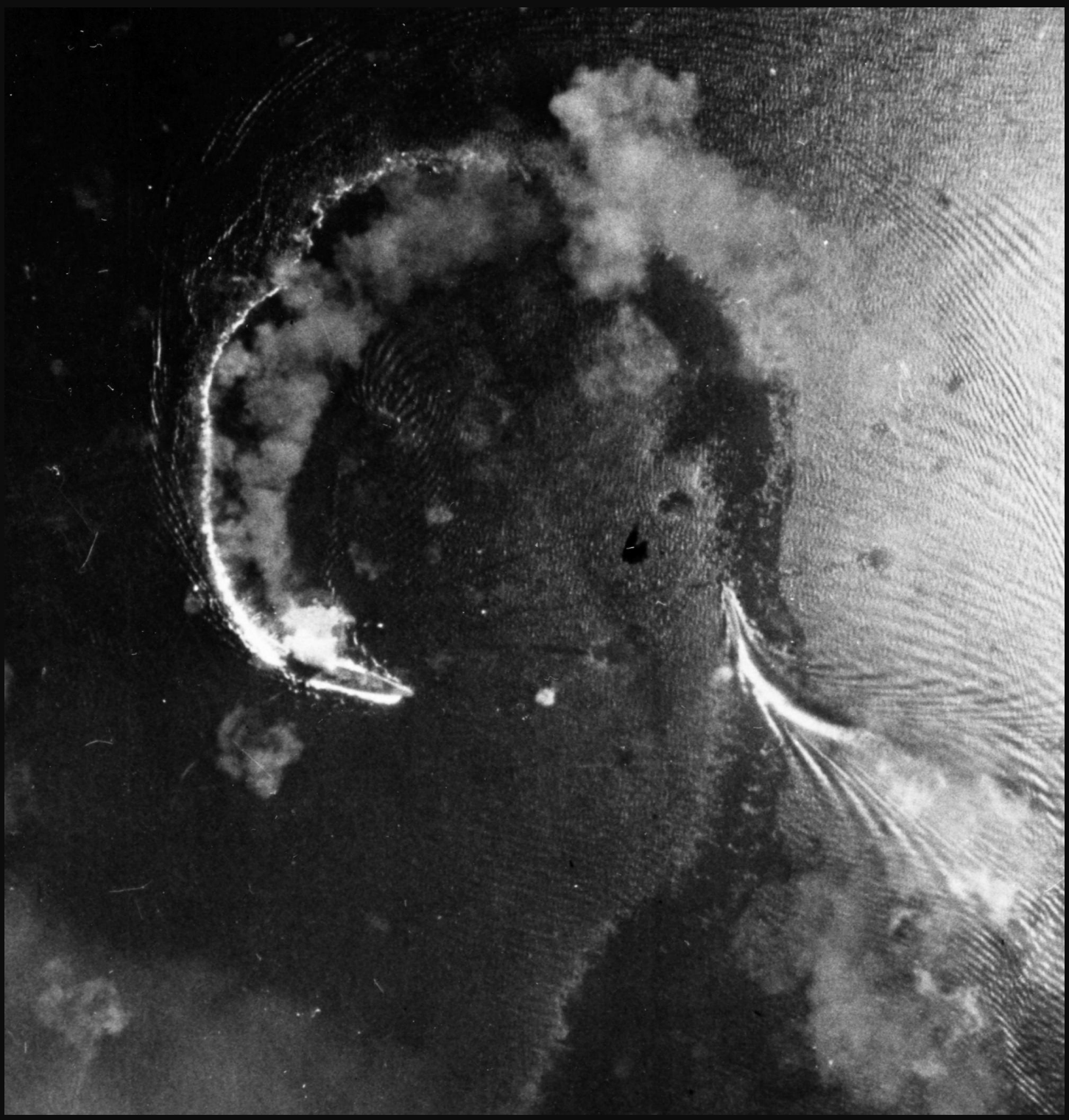
"This photo shows the torpedo strike at frame 145 port during Intrepid's 2nd strike between 11:36 to 11:49. There are actually four torpedoes in the water with one torpedo having an erratic run."



117. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
Photo courtesy of Robert Lundgren He describes this photo*: "Musashi continues to turn hard to port in an attempt to evade torpedoes. The destroyer Okinami was off her bow."*

118. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
Robert Lundgren analyzes this photo:

"This view may appear as a second hit, but it is the same impact and waterspout seen previously but as Musashi moves forward the waterspout moves aft making it appear like another impact."



119. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
A higher resolution wider version of the previous photo. Photo often misidentified as showing Yamato.

VT-18
Strike 2 Baker - 24 October 1944
Torpedo Attack Yamato Class BB
Three dying wakes clearly visible.
Converge at position occupied by BB
at time of explosion and are not
visible on other side of wake.
Note circular wave pattern radiating
from torpedo's explosion in that position.
223

120. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
Photo courtesy of Robert Lundgren He describes this photo:

"You can see the explosion wake effects in the water on the port side of Musashi and it is a singular circular ring from one detonation not three. Had additional torpedoes detonated we would have seen three of these explosion wake effects. This is the best indication that only one torpedo detonated during this strike."

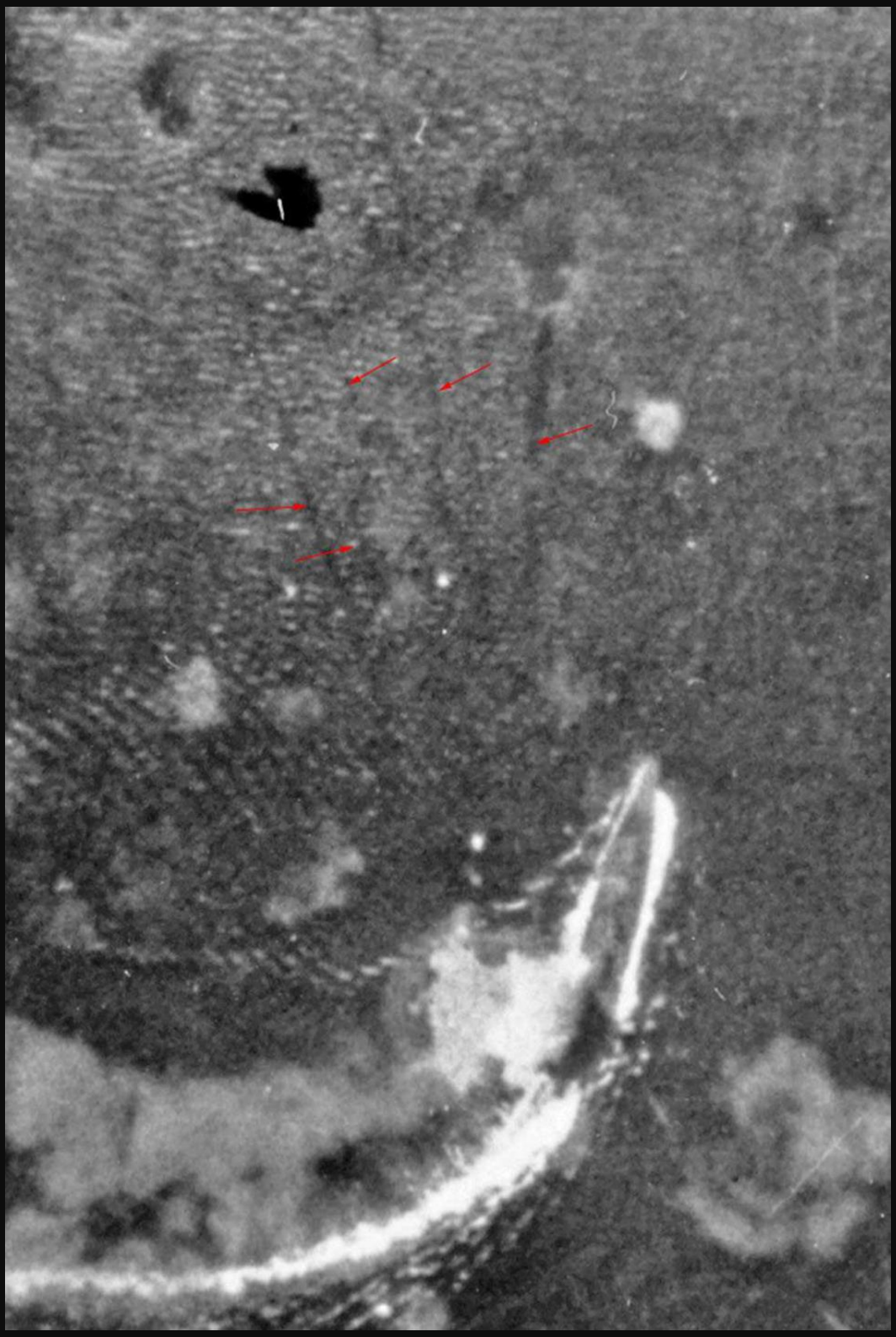
121. Musashi Pounded by Torpedo, Sibuyan Sea, October 1944
Robert Lundgren writes:

"A closer view the effects of the water plume moving aft as Musashi moves forward again making it appear like a third impact."

122. Musashi Plows Forwards After Torpedo Hit
Robert Lundgren writes:

"This photo clearly shows the track of three torpedoes. The fact that in her initial report Musashi claimed three torpedoes hit her but only the one at frame 145 resulted in inboard flooding implies that the two reported impacts at frame 80 and frame 110 did not detonate but I feel it is highly likely they did impact but were duds. In the first strike two torpedoes

passed underneath her keel and this could also be a possibility. This would largely then explain U.S. accounts and Japanese accounts for this strike and remain consistent with the photographs. These photos represent the port side attack between 1136 and 1149."



123. Musashi Pounded by Torpedo at Leyte Gulf, 1944

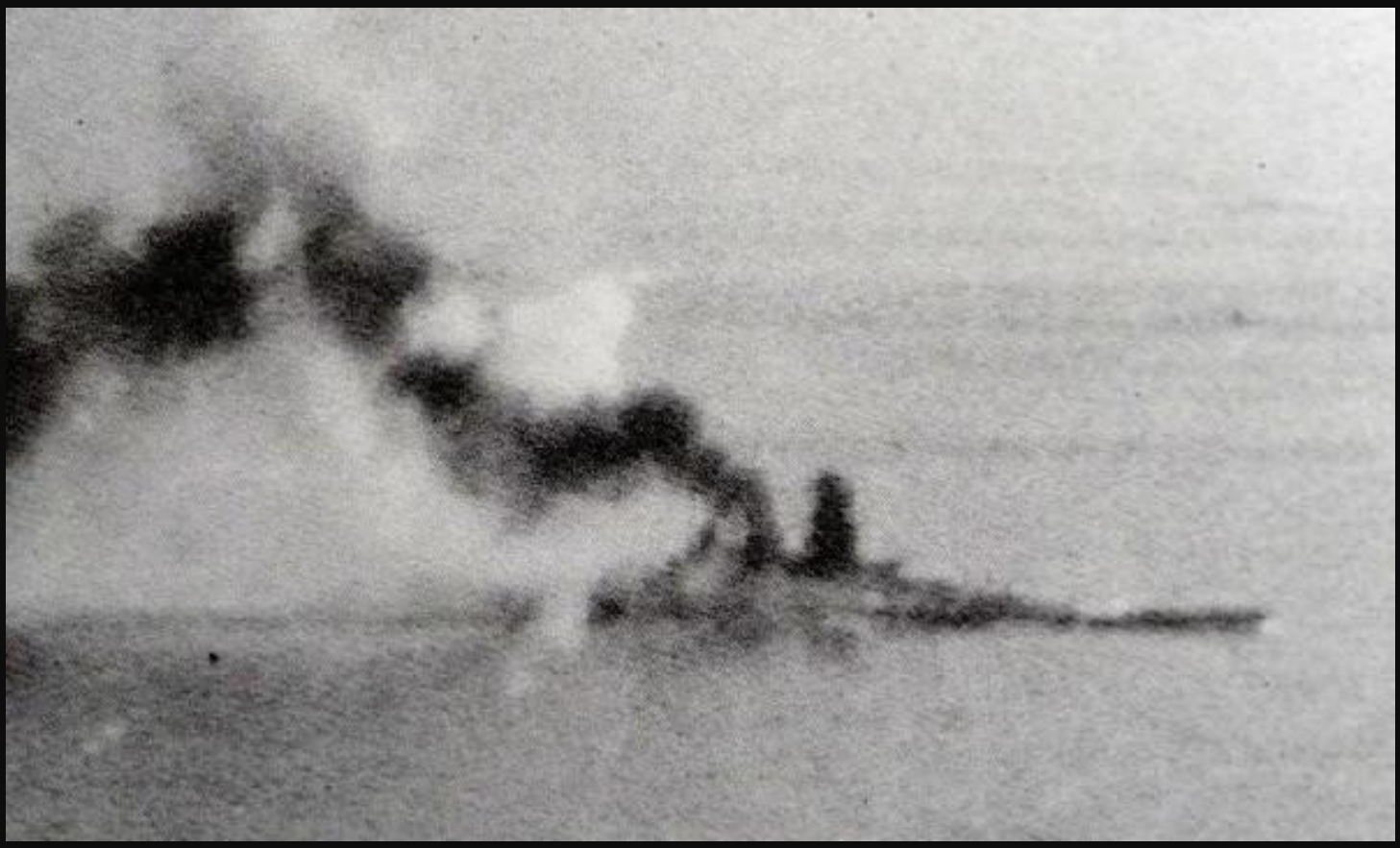
Ed Low of the IJN Facebook page sent me this photo on which he pointed out with red arrows no fewer than FIVE (5) possible torpedo tracks.

124. Bomb Narrowly Misses the Musashi, October 1944

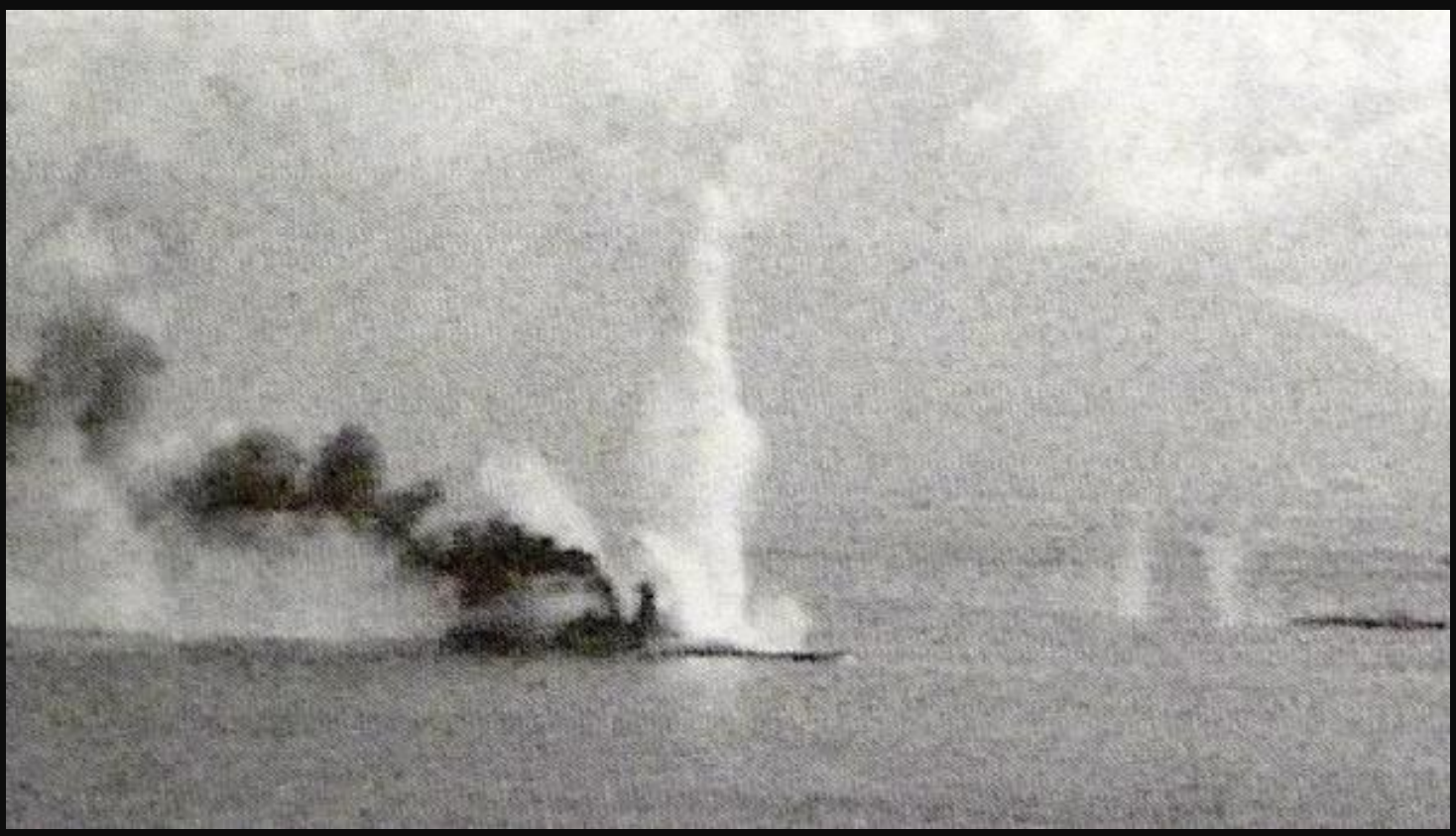
A close-up of the fifth photo in the series shows Musashi steaming away from the dissipating cloud of mist following the torpedo strike shown earlier.

Anthony Tully adds: *"Its worth noting this is one of the few verticals comparable to the quality ones later of YAMATO on*

October 26, 1944 but definitely MUSASHI since the the partly empty 12.7cm platforms that look bare because of the machine guns show clearly here."



125. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944
Yamato escaped most of the US Navy's attention as the planes concentrated on her sister ship.

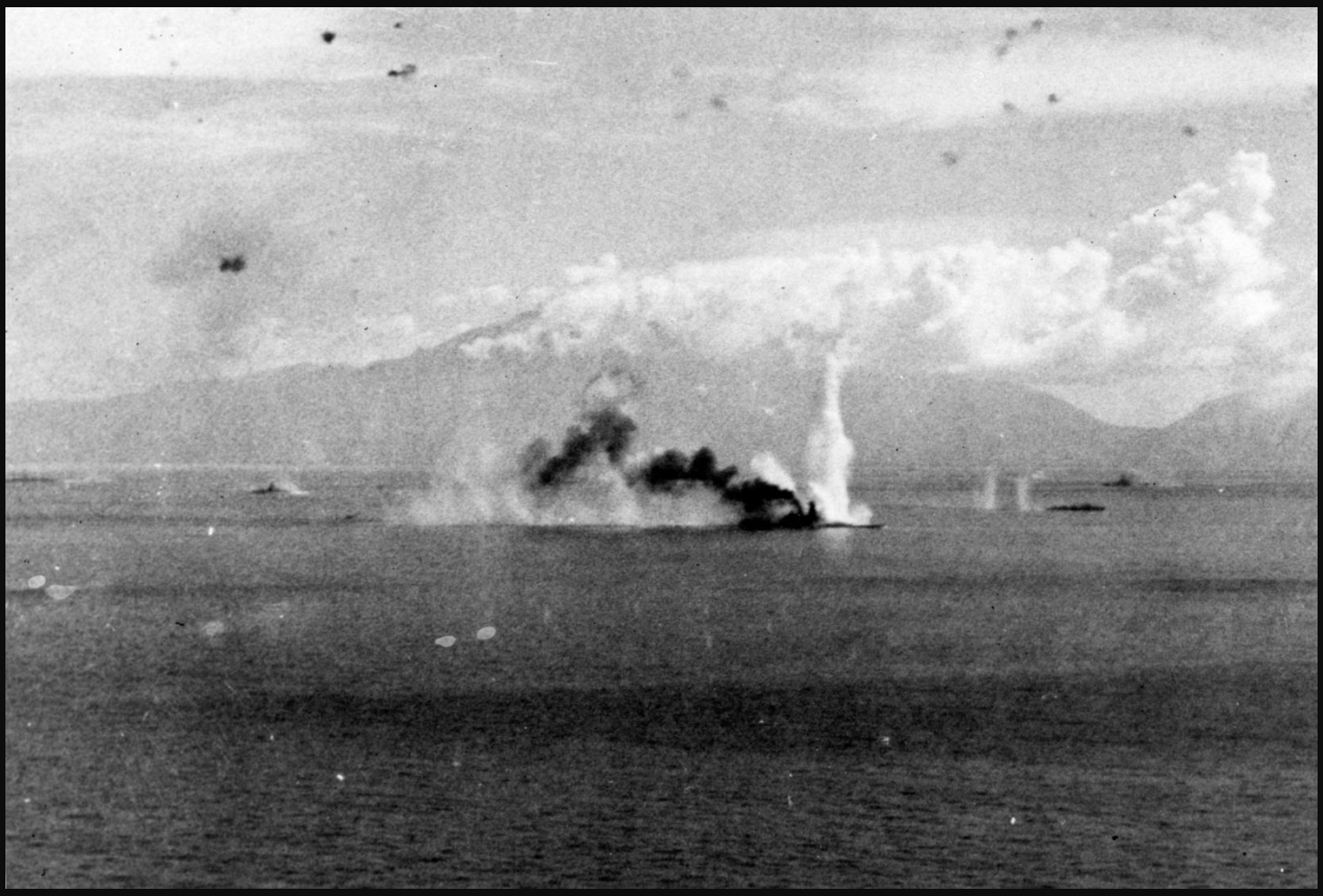


126. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
A torpedo hit sends an 80-story column of water far above Musashi's main tower. Navy Archives caption reads:

"Japanese battleship Musashi is hit, during attacks by Task Force 38 aircraft in the Sibuyan Sea."

127. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
Wider version of the previous photo provided by Robert Lundgren. He writes:

"The Musashi under attack- already down by the bow and stuck by another torpedo which threw water approximately 800 feet high. The following series of photos were taken by VB-20 of the U.S.S. Enterprise".



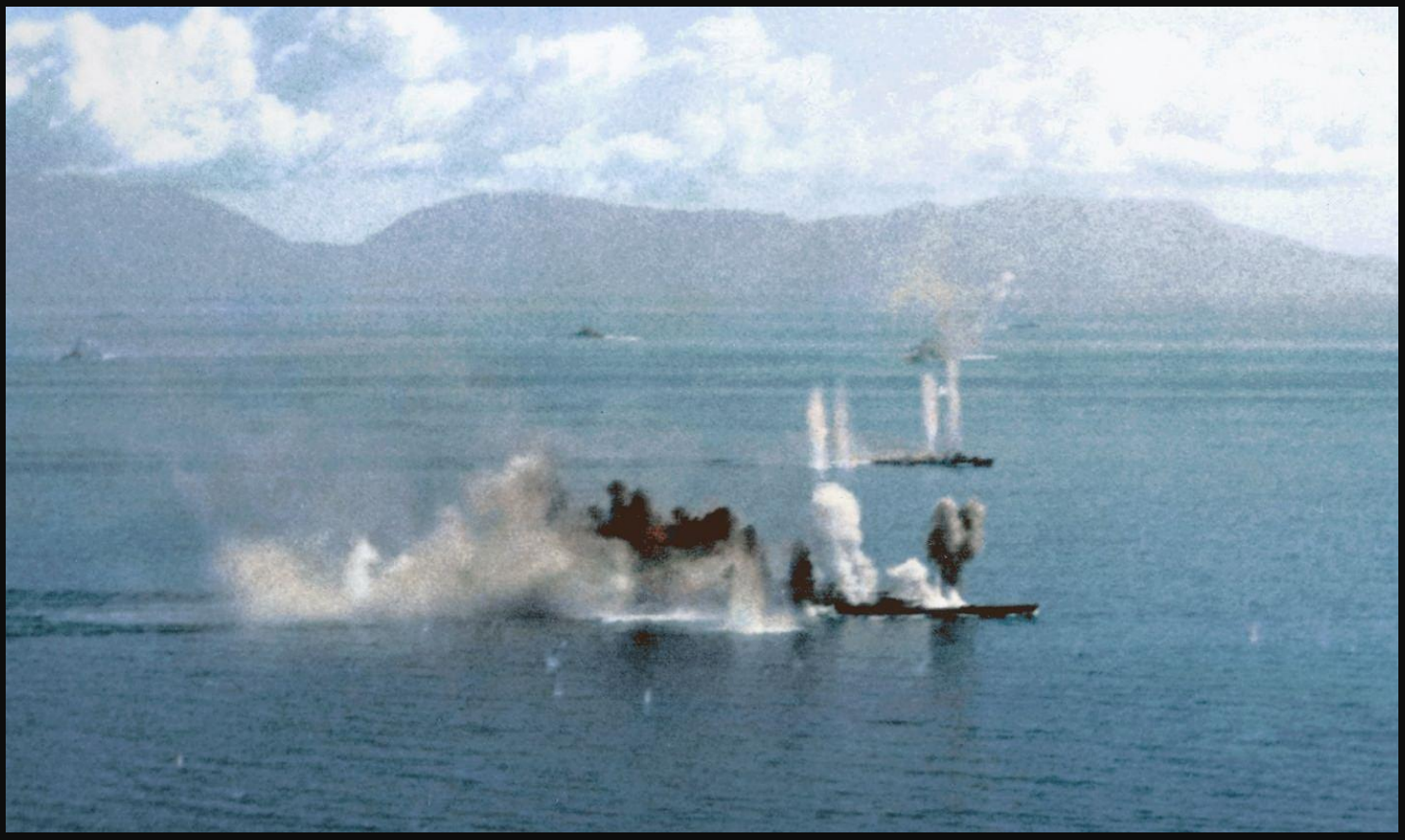
128. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
A higher resolution version of the previous photo of Musashi hit being hit by a torpedo. Note the AA explosion puffs of black smoke. Yamato is seen behind the destroyer on the right, in the distance, turning circles to avoid bombs.

129. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
Slowed down by her damage, here the Musashi is hit by a 'scissoring' attack - airborne torpedoes launched simultaneously from both sides, with dive bombers hitting the ship from above. Note the destroyer in the background, which has just barely escaped being hit by rockets fired from US Navy planes.

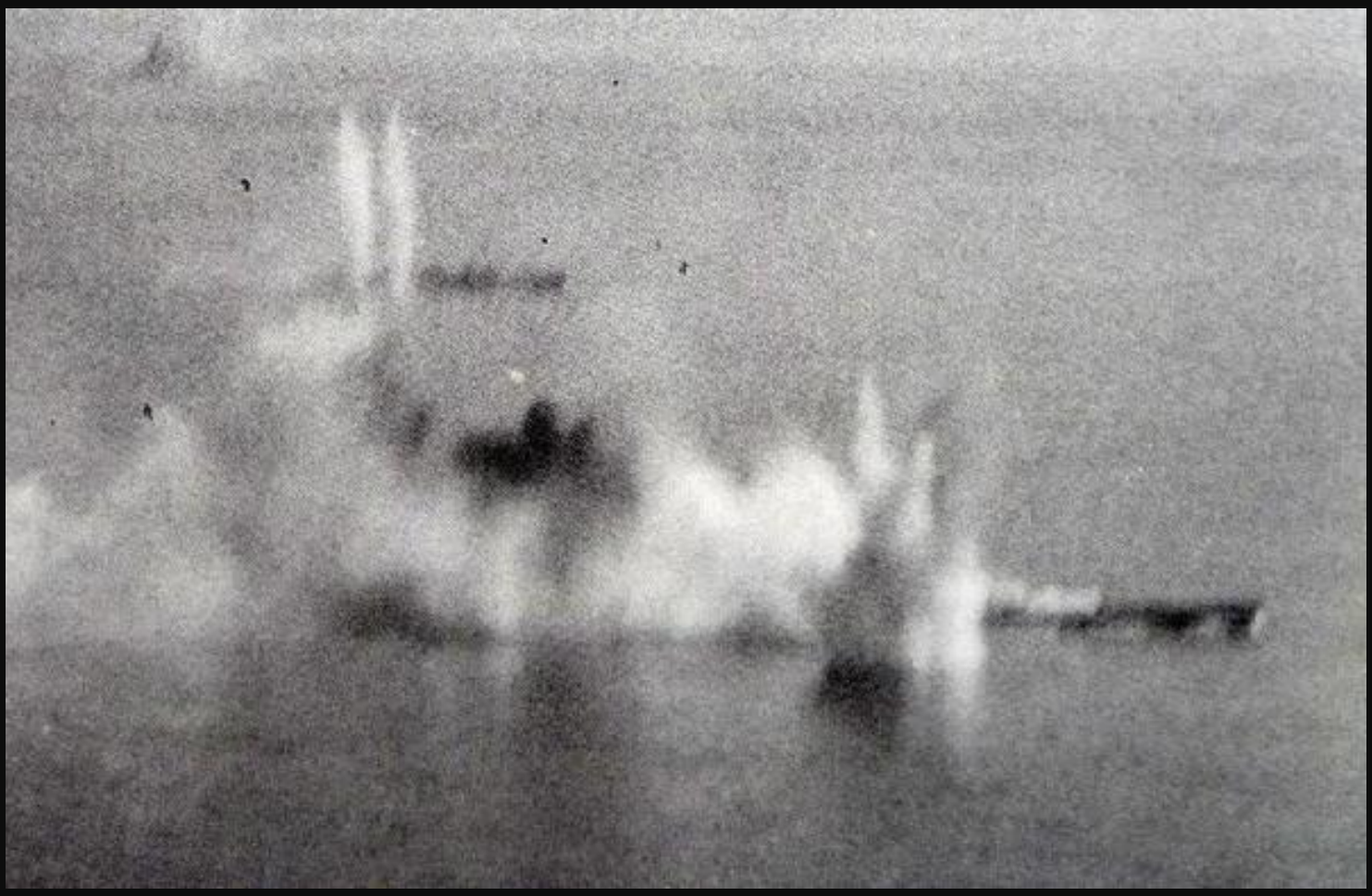
Navy Archives caption*: "Task Force 38 aircraft attack the Japanese battleship Musashi (foreground) and a destroyer in the Sibuyan Sea."*

130. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
Wider version of the previous photo provided by Robert Lundgren. He writes:

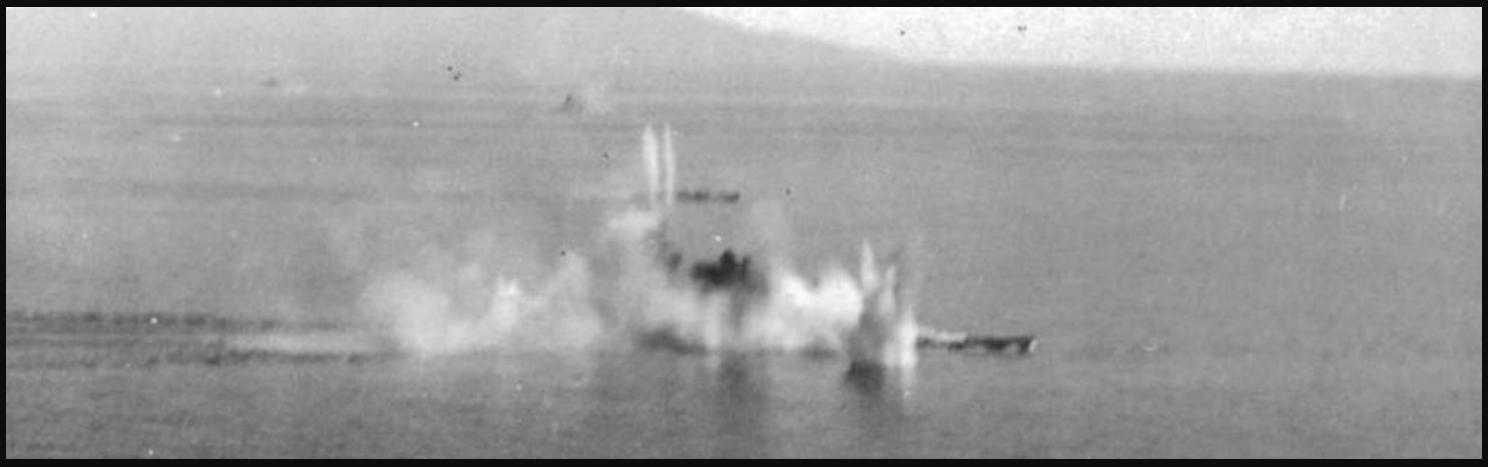
"The Musashi was struck by bombs around frame 65 or 70 port. Note black smoke forward. The destroyer behind her was straddled by rocket fire."



131. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
A colorized view of the last photo. Colorized photo courtesy of Irootoko Jr.



132. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
In the background two rockets have just missed an escorting destroyer.



133. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
Wider version of the previous photo provided by Robert Lundgren. He writes:

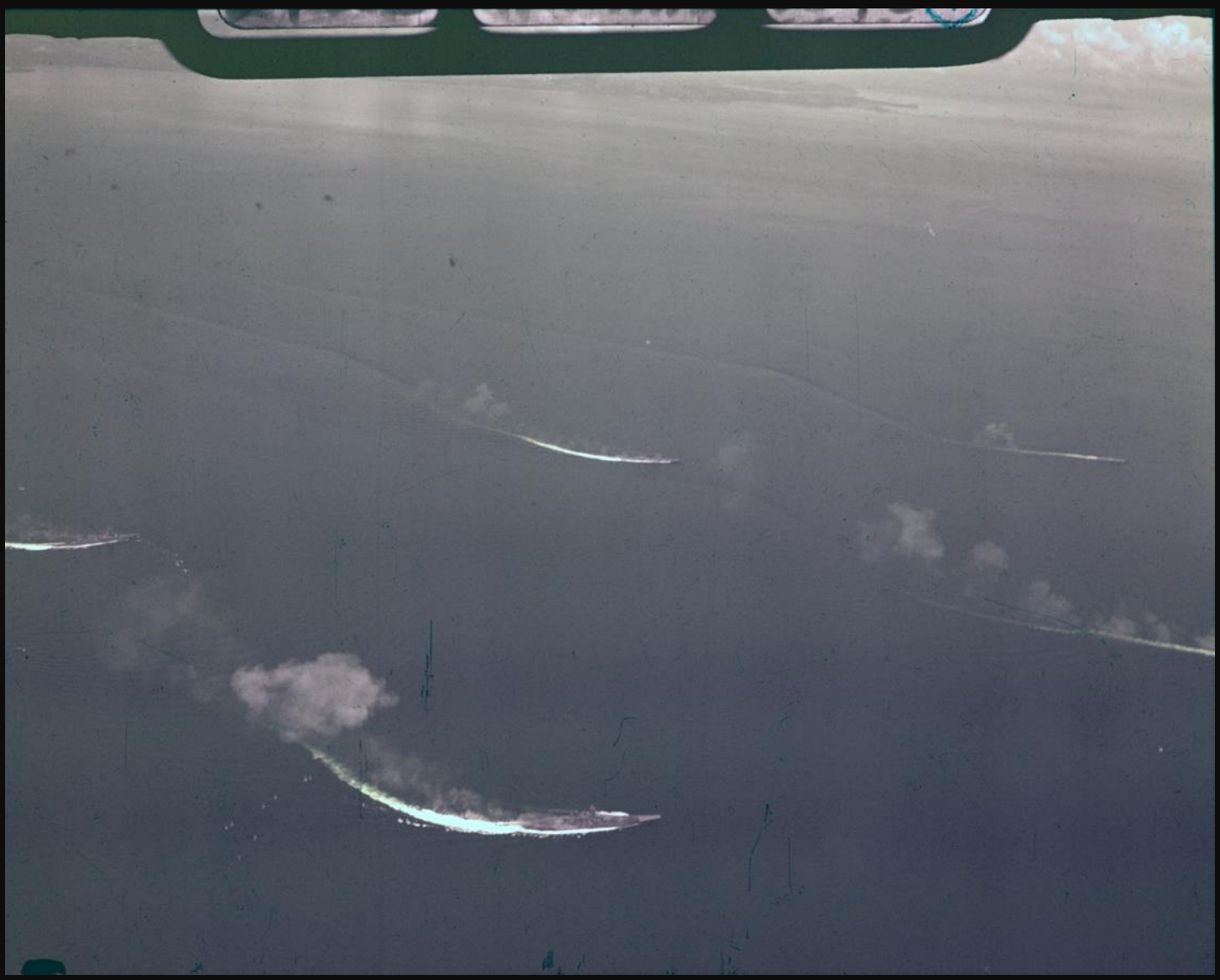
"Water pours over the Musashi as another bomb landed to her starboard side and smoke covers her forward turret from bomb hits."

134. Musashi Under Fierce Bombardment, Sibuyan Sea, October 1944.
Musashi smoking after receiving multiple bomb and torpedo hits - note the water splash near the bow on the starboard side - it looks like a geyser from either a torpedo hit or a bomb near-miss has just fallen back down and water is pouring off the front deck. Around 15 bombs and 17 torpedoes seal her fate.

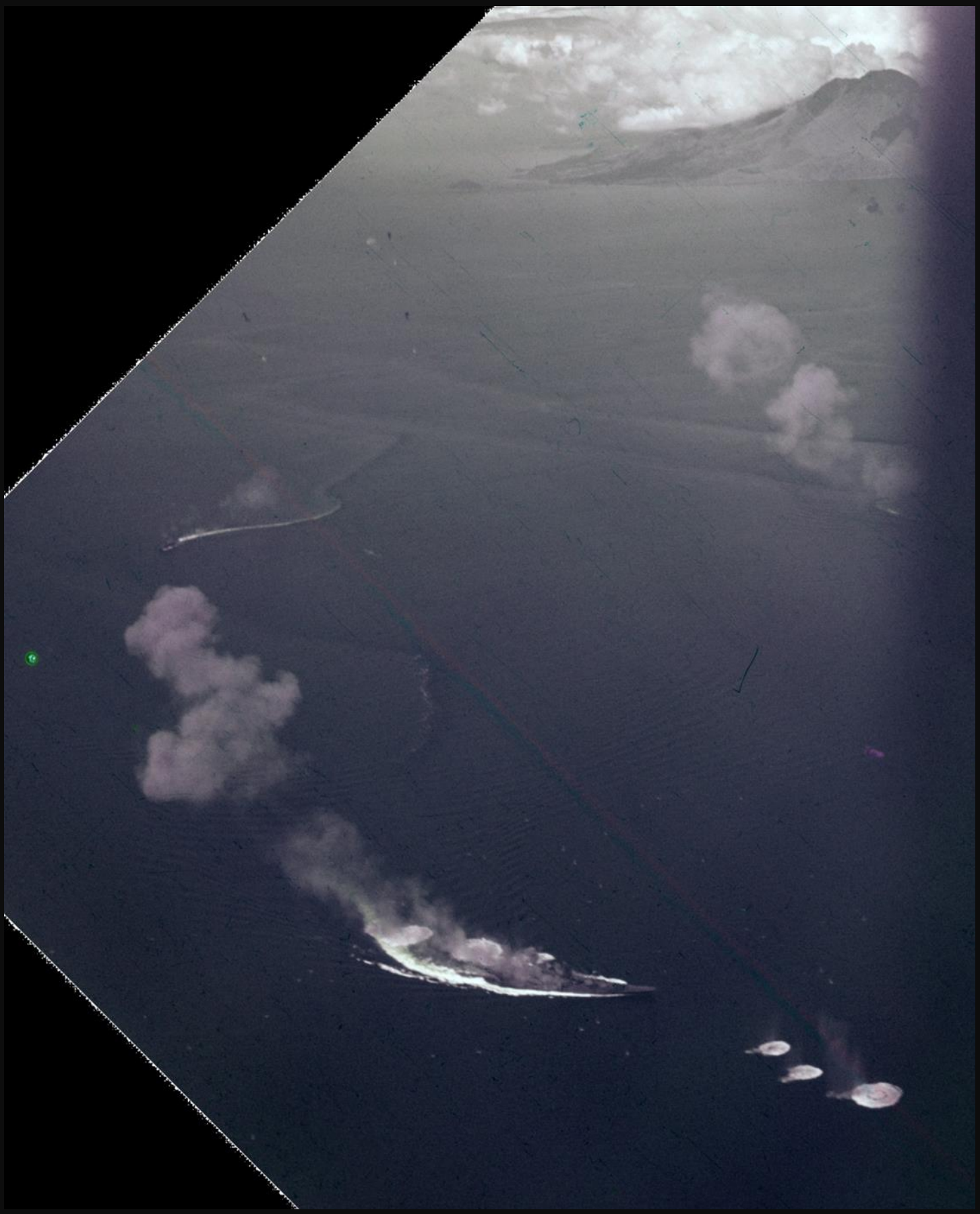
135. Bombs Score Hits and a Near Miss on Musashi, October 1944
Robert Lundgren describes this photo:

"Photo taken of Musashi of the fourth and fifth bombs hit around frame 115 starboard, detonated on the forecastle deck and caused extensive topside damage. A third bomb is a near miss. This photo was taken by planes from U.S.S. Intrepid."

136. Bombs Score Hits and a Near Miss on Musashi, October 1944
A wider version of the previous photo.

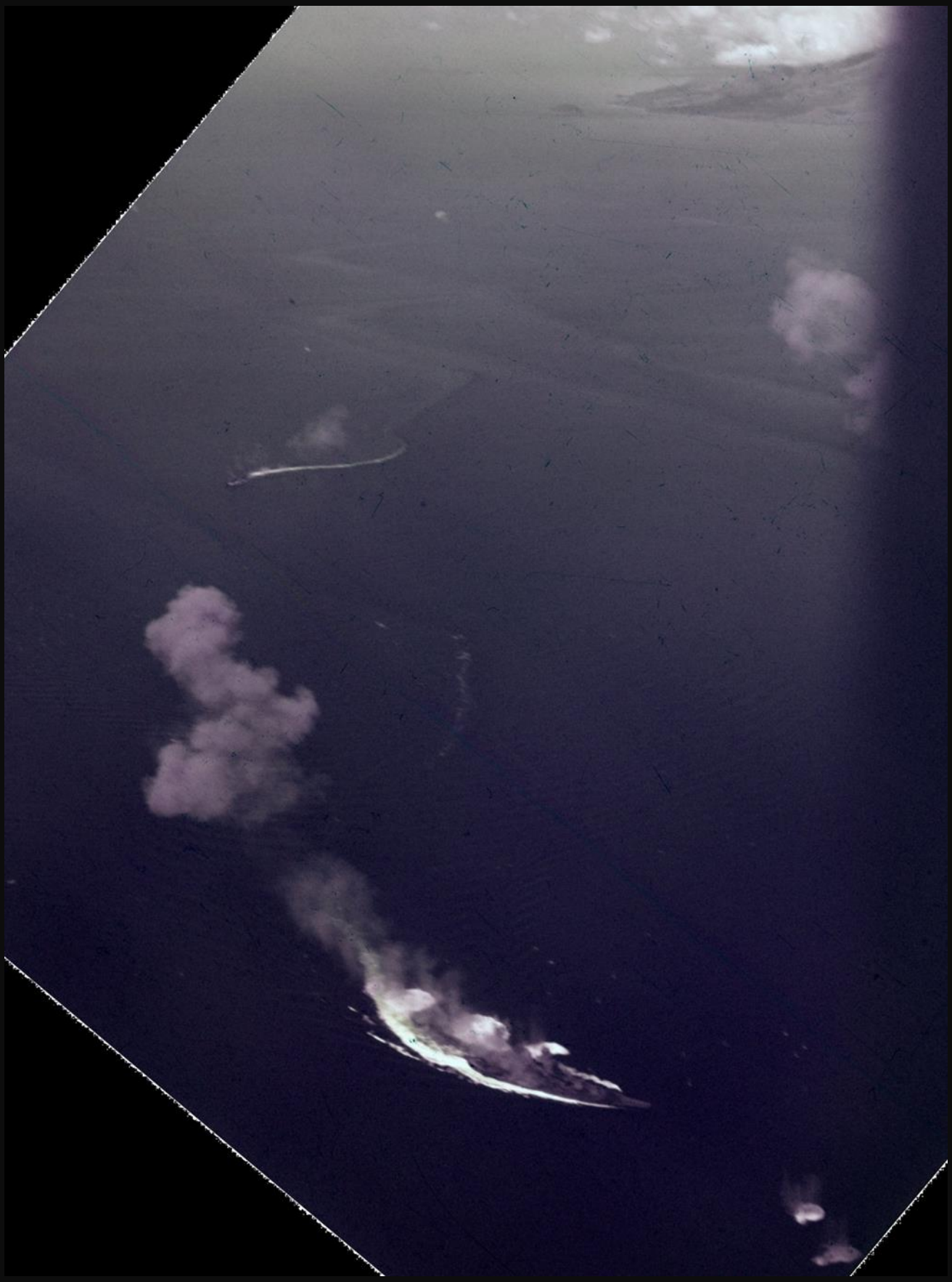


137. Musashi and Escorts maneuver under attack in Sibuyan Sea on 24 October 1944
Please zoom in – this is a Hi-Res photo. This photo and the 2 succeeding photos were taken on color stock film and are not colorized. The photographer was Richard Shipman of the aircraft carrier USS Intrepid.



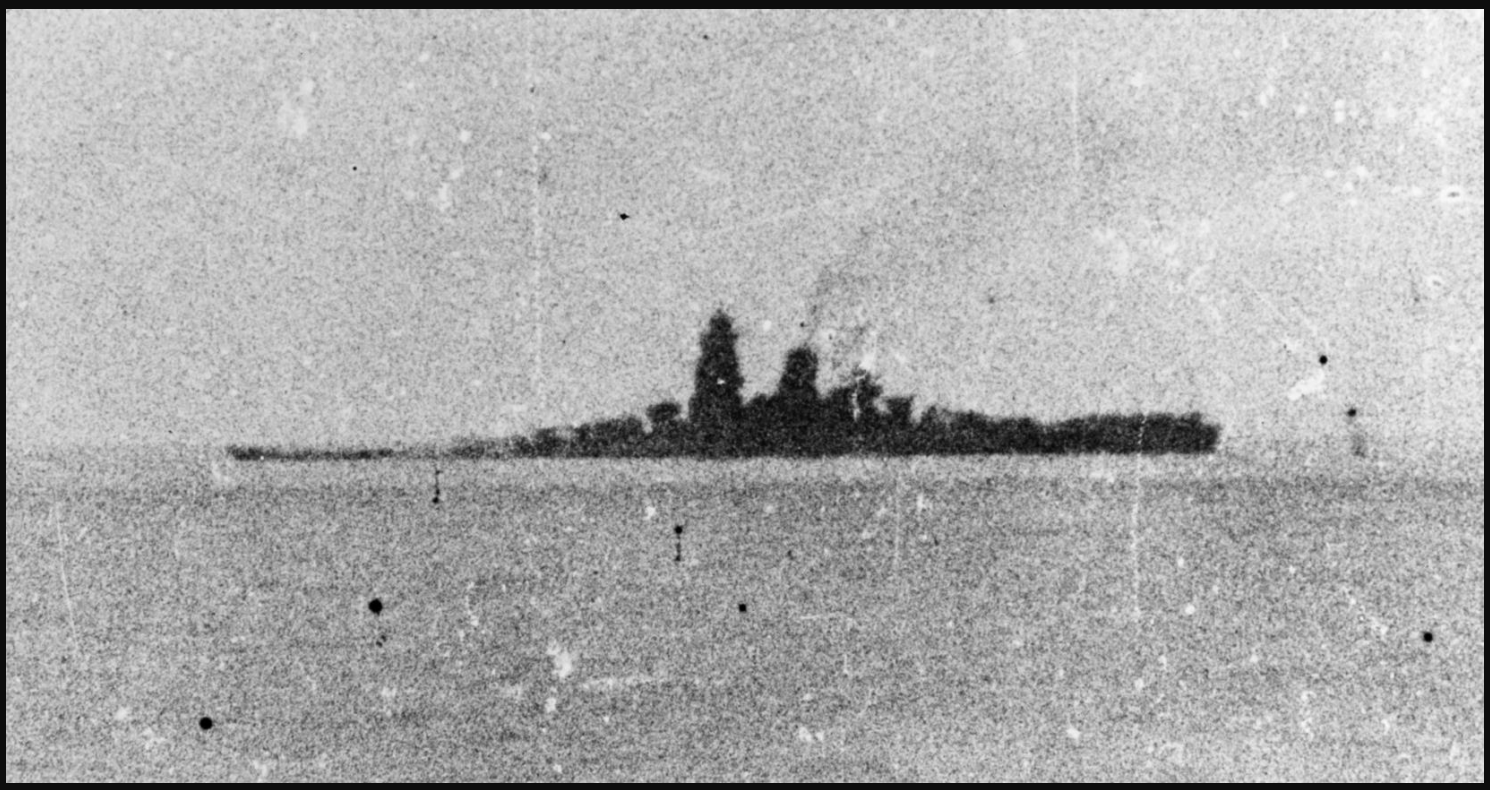
138. Musashi and Escorts maneuver under attack in Sibuyan Sea on 24 October 1944

Note the 5 or 6 near-misses marked by the foam on the water. Please zoom in – this is a Hi-Res photo.
The mountain in the top right of the photor is the Makirin volcano on Marindouke Island.



139. Musashi and Escorts maneuver under attack in Sibuyan Sea on 24 October 1944
Smoke from her AA fire obscures her starboard side in this photo. Please zoom in – this is a Hi-Res photo.

140. Musashi and Escorts maneuver under attack in Sibuyan Sea on 24 October 1944
Zoomed in view of the ship from the last three photos. Note that the photos in this sequence were taken on color film – this is not colorized, but is natural color.



141. Musashi Sinks

Musashi slowly going down by the bow. The Captain was ordered to try to beach the ship on a coral reef, and then use it as a 'gun platform' against American ships. Because the ship's hull had been torn apart on both sides by torpedo hits, the Captain hesitated to gun the engines for fear of capsizing the ship.

Moving at a snail's pace, Musashi made it half way to the reef before power was lost and the engines stopped.

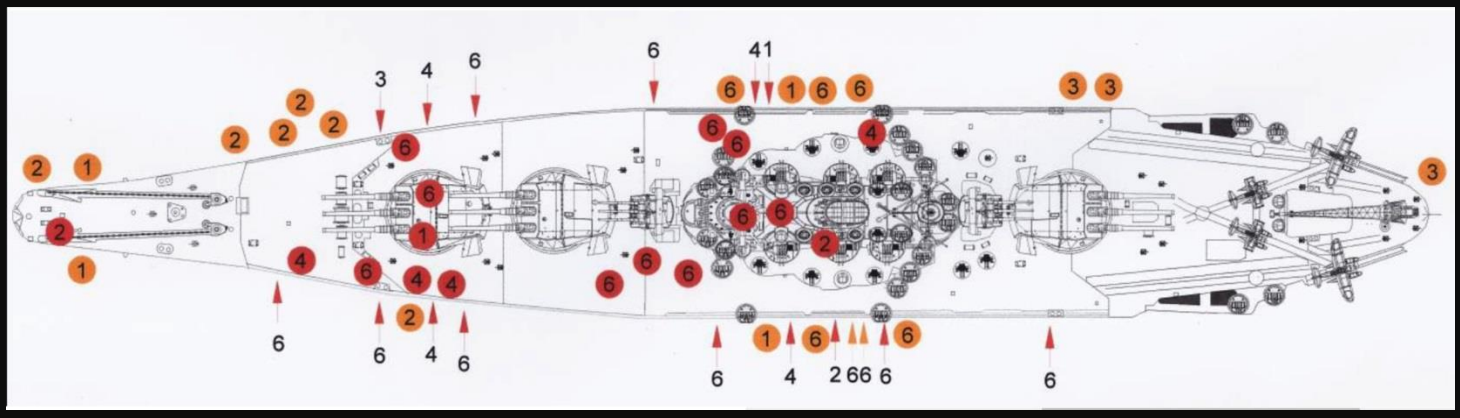
By that time the entire front of the ship was underwater, with the two front 18.1" turrets standing above the water like two islands.

Shortly afterwards, the ship suddenly capsized to port, taking nearly half her crew down with the ship. A minute or two after the ship sank, several tremendous underwater explosions tore the wreck to pieces.

The entire harrowing ordeal from the beginning of the battle to her sinking took an agonizing 9 hours to play out.

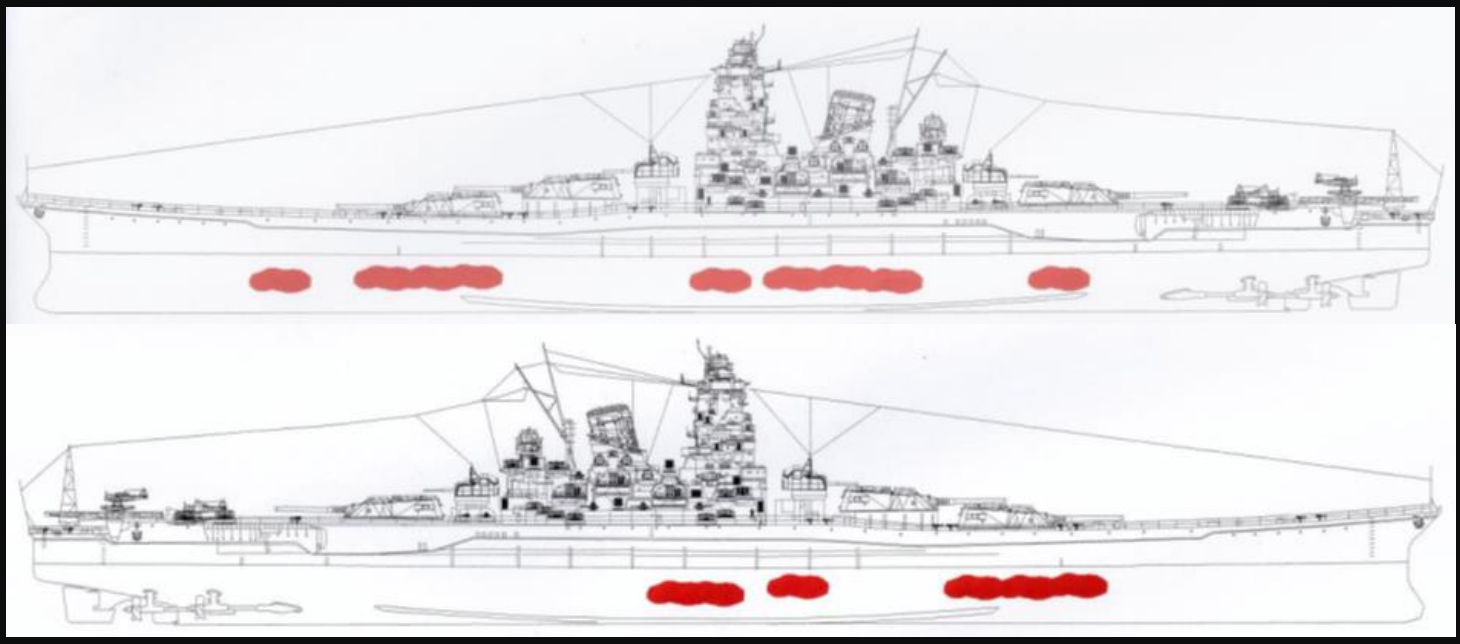
142. Musashi Sinks

Full photo taken by a sailor aboard destroer Isokaze, standing by as Musashi sank. Colorized photo courtesy of Irootoko Jr. Thanks to Christian Van Der Sanden for the photographign ship ID.



143. Diagrams of torpedo and bomb hits, near misses and duds on Musashi at Leyte Gulf.
Diagrams prepared by, and courtesy of, Robert Lundgren. He writes:

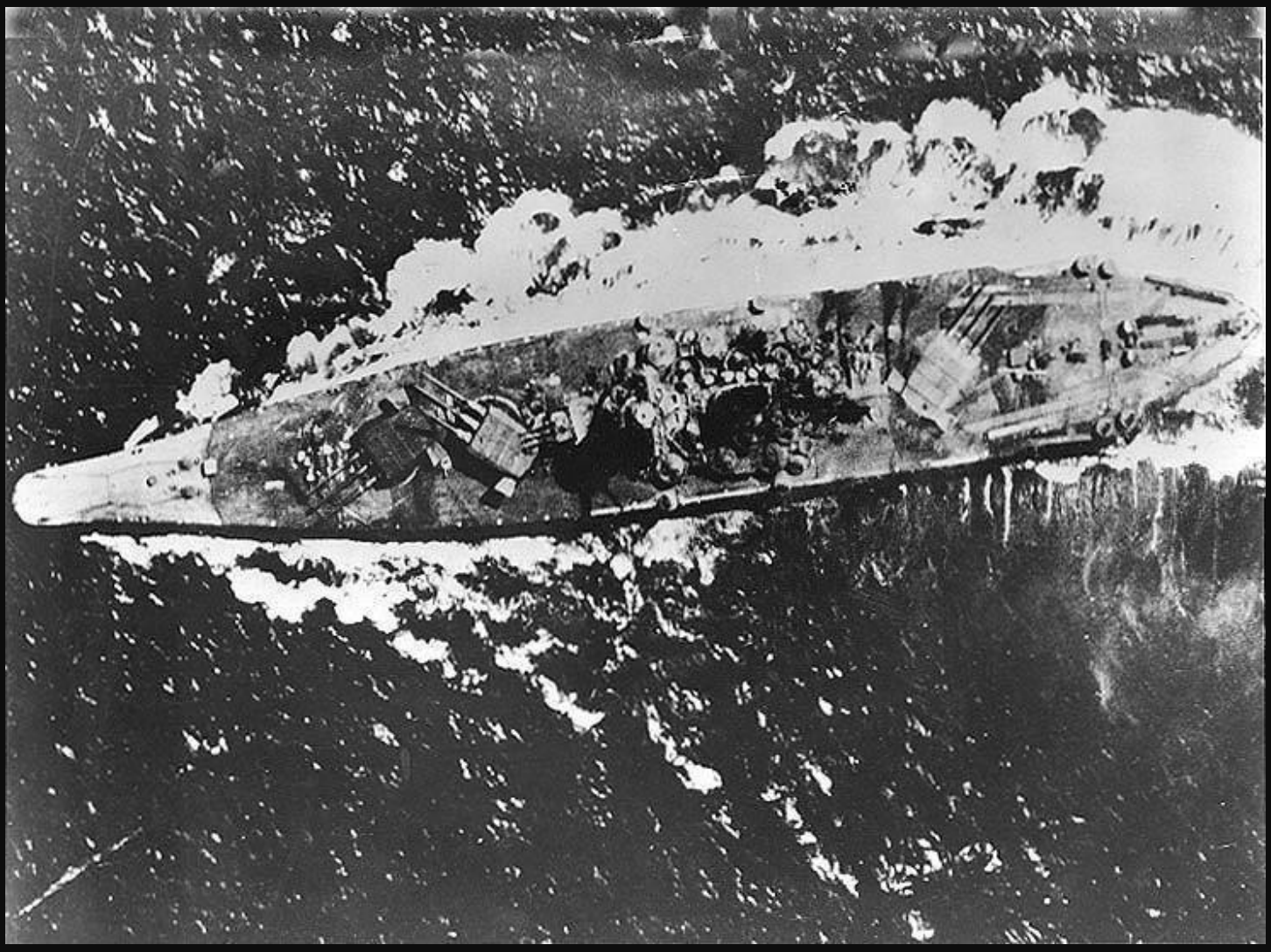
"This drawing shows the locations of bomb and torpedo hits in red and near-misses in orange on the battleship Musashi. The number is the attack wave based on Musashi's perspective in which they occurred. It is based on Musashi's DAR page 263 in her action report. It does not include the possible dud torpedoes at frame 80 and 110 in strike two or the two reported torpedoes that passed under her keel in the first attack but does include the two duds in the 6th attack reported in her DAR."



144. Diagrams of torpedo hits, Port side and Starboard side, on Musashi at Leyte Gulf.
Diagrams prepared by, and courtesy of, Robert Lundgren

145. Yamato under Attack, October 1944
Robert Lundgren describes the action in this photo:

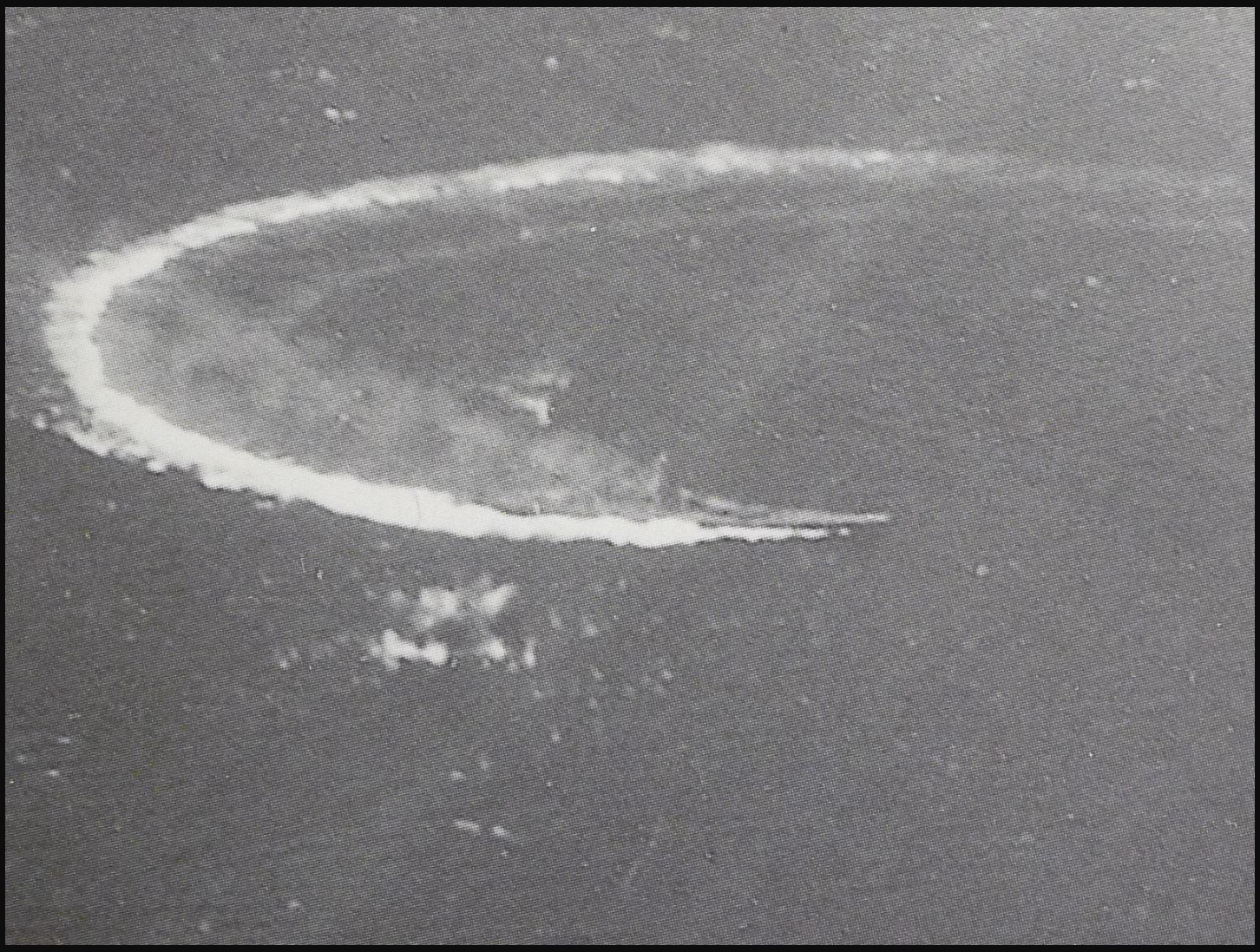
"The Myoko (L) was hit by a torpedo at 1029 on October 24, 1944, during the first wave of American aircraft to attack the Japanese fleet. The Yamato is in the background at the center of the formation. Musashi is out of the picture directly aft of Myoko."



146. Yamato Maneuvers to Avoid Attack, Sibuyan Sea, Oct. 1944
Please zoom in – this is a Hi-Res photo.

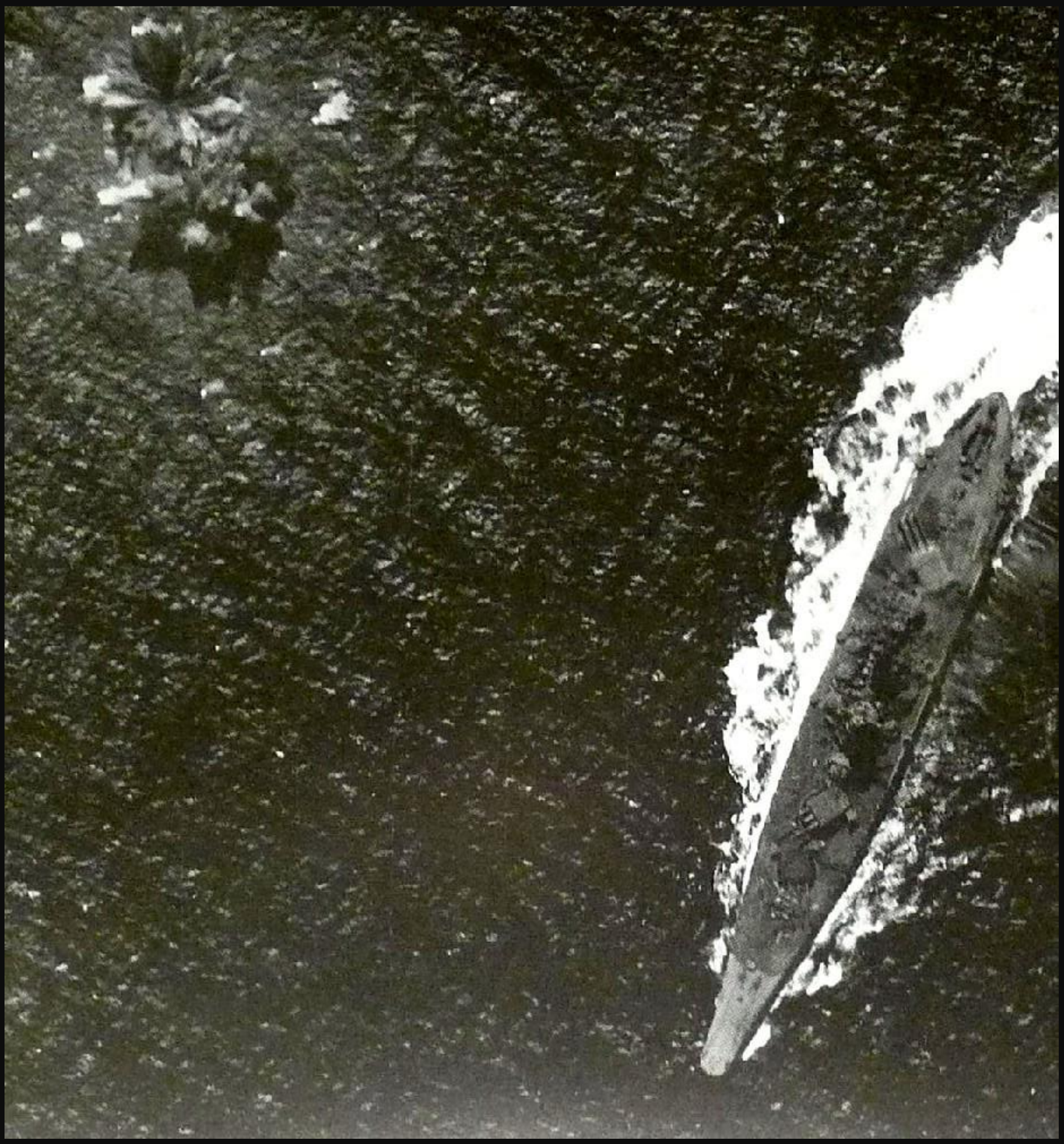
147. Yamato and Nagato Under Attack, October 1944
Yamato is at the upper left. In the lower right, Nagato has just been hit by a bomb.

148. Yamato Under Attack, October 1944
Yamato – the rear half of the ship is visible on the middle right edge of the photo – turn a circle to avoid dive bombers.



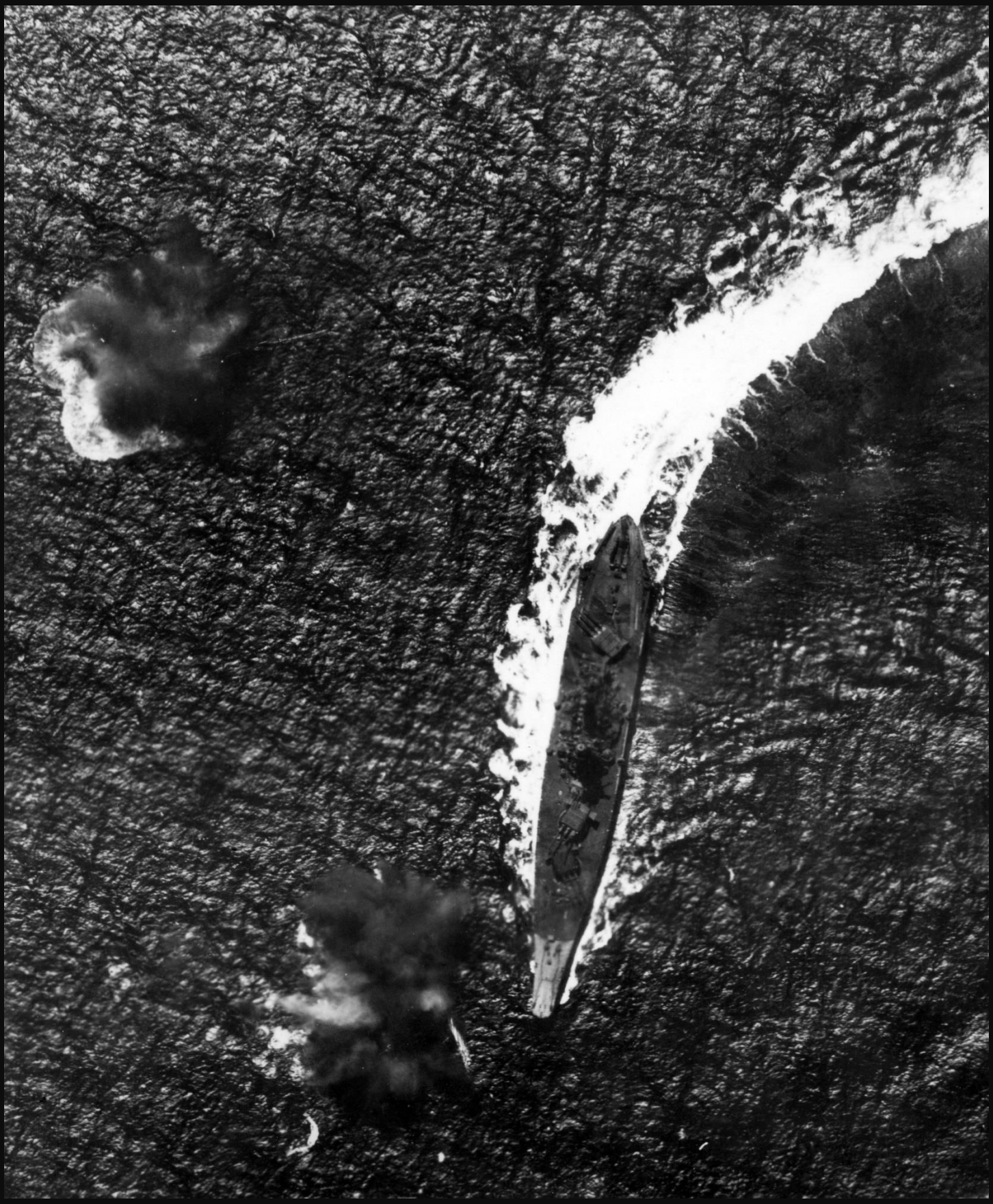
149. Yamato Under Attack, October 1944
The following remarkable sequence of photos, taken by two different USN planes from different vantage points, documents a ferocious bombing attack on Yamato.

Here the first bombs can be seen detonating to her starboard. The ship has taken a sharp turn, maneuvering in a circle, to avoid the coming attack.

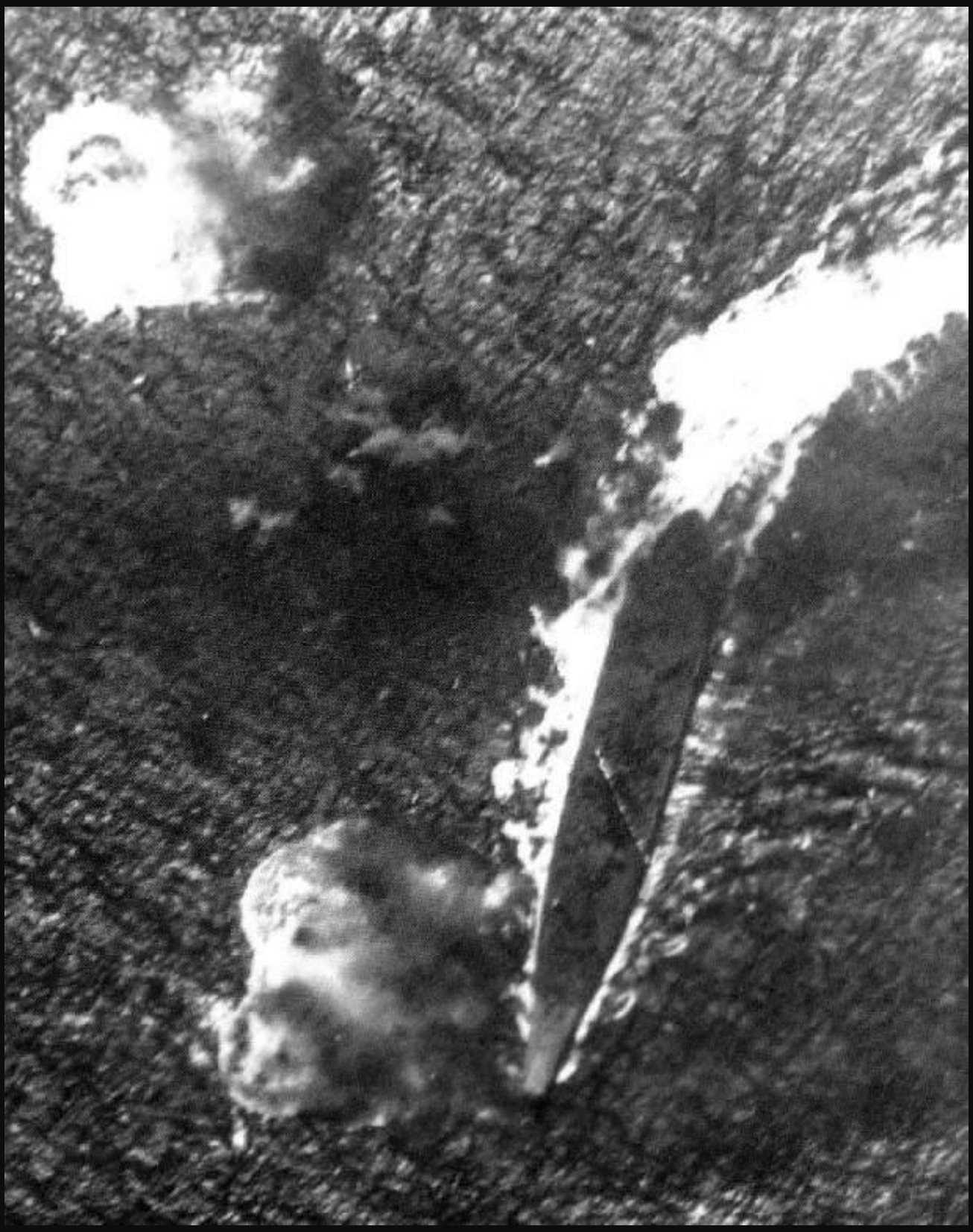


150. Yamato Under Attack, October 1944
An overhead view of the same near-miss

151. Yamato Under Attack, October 1944
Bombs start exploding closer to her starboard side, with another cluster detonating just ahead of her bow.

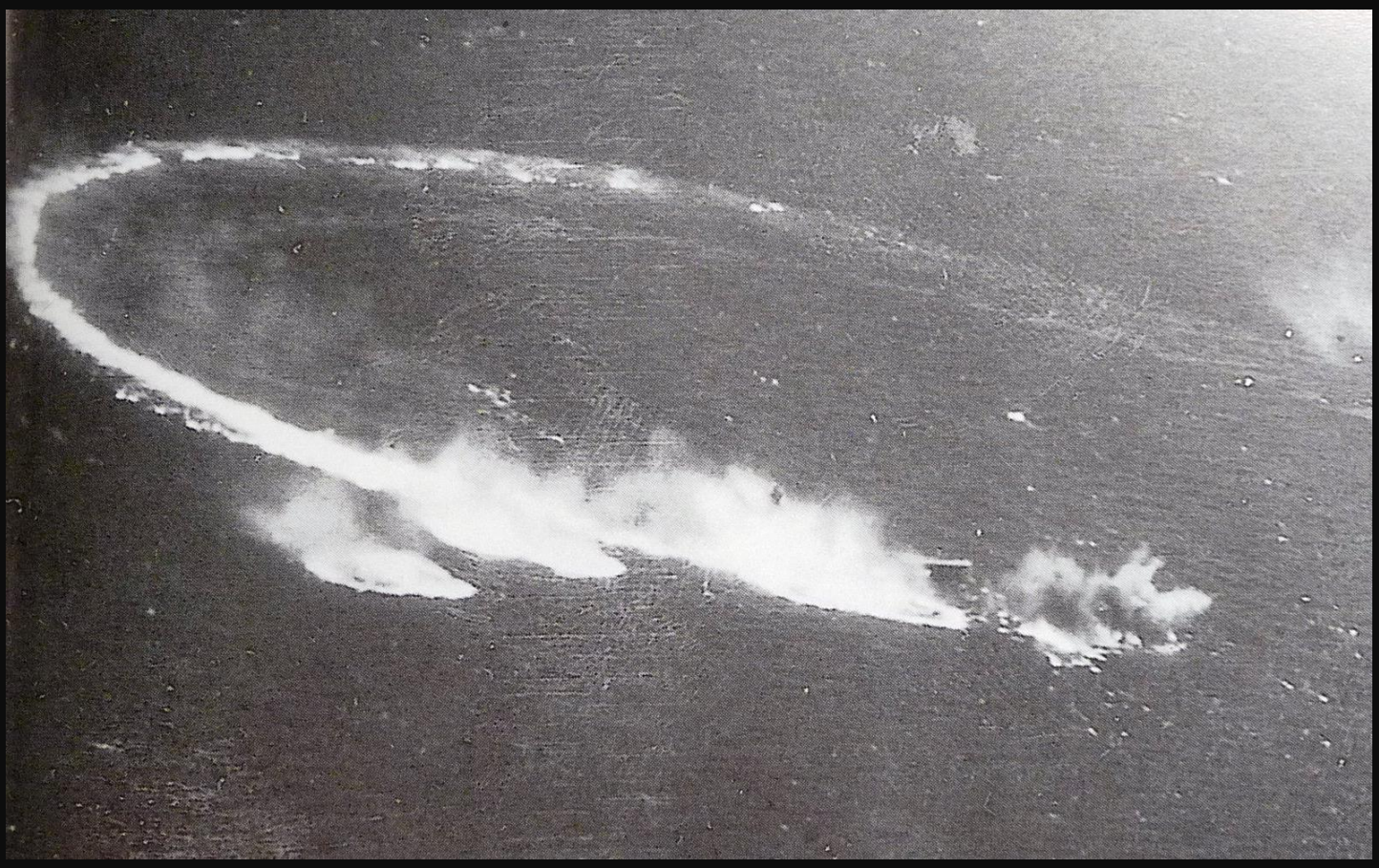


152. Yamato Under Attack, October 1944
This high resolution large photo shows how close the bombs are getting.



153. Yamato Under Attack, October 1944

Yamato keeps up her sharp turn, undoubtedly creaking and yawing (according to Yoshida's descriptions of the action off Okinawa), but the maneuver is a success because ...

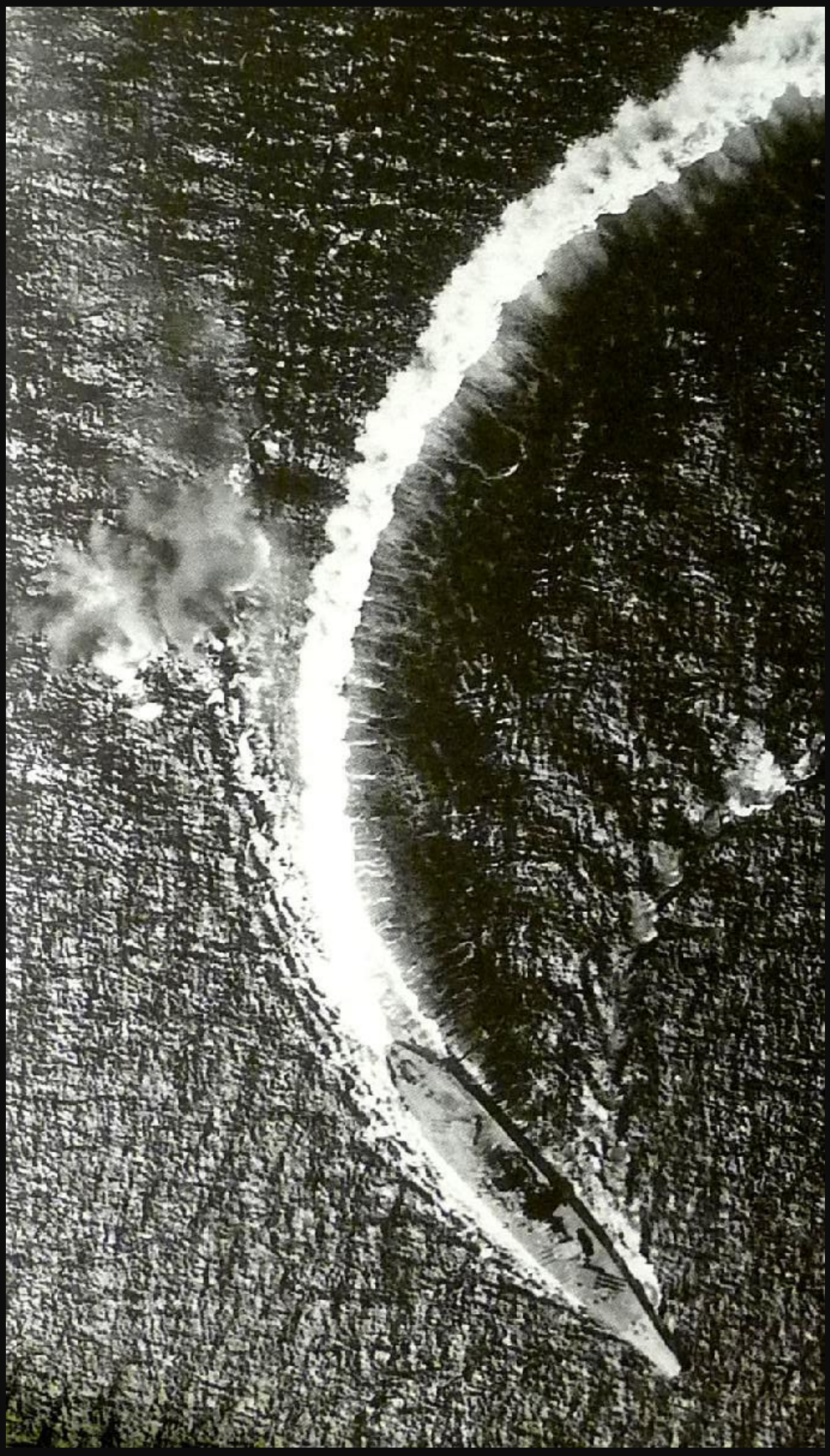


154. Yamato Under Attack, October 1944

... as the next batch of bombs narrowly misses, the ship nearly disappears behind the geysers of water.
Bombs also explode just ahead of the ship. Note the top of Yamato's main tower protruding - it is 18 stories high.

155. Yamato Disappears Under a Wall of Water - October 1944

The same scene as witnessed from above - we see multiple bomb near misses drenching Yamato's decks with seawater, nearly obscuring the entire ship. Bombs can also be seen exploding ahead of the ship, as in the last photo.



156. Yamato Under Attack, October 1944

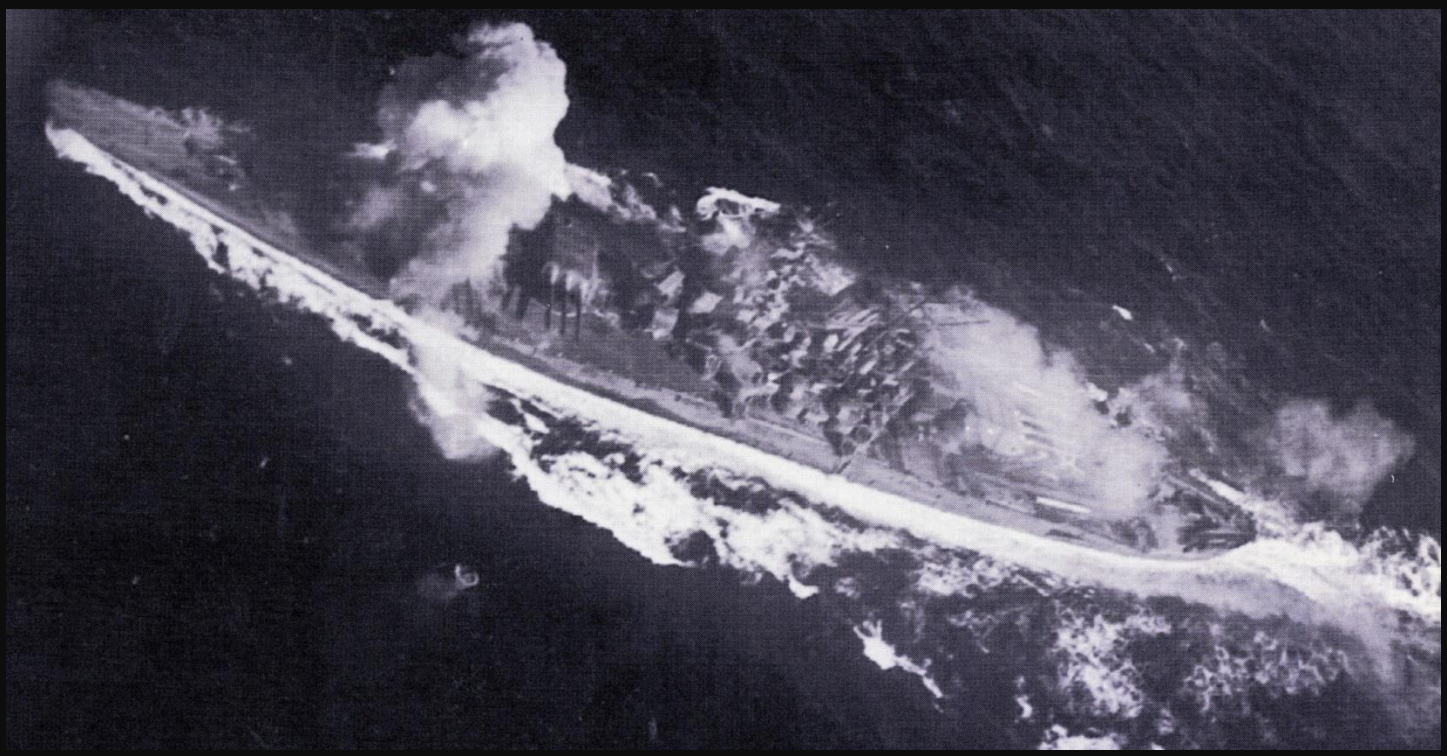
Yamato finally gets some breathing space as the dive bombers appear to have shot their bolt - for the moment.

157. Yamato Hit by Bomb While Transiting the Sibuyan Sea, October 1944
During the 3-day battle, Yamato is hit by a total of about 7 armor-piercing bombs. Yamato avoids torpedo attacks, most of which are concentrated on her sister, Musashi, which is sunk.

Yamato ships 3000 tons of water as several bombs penetrate the deck and blow out holes in the sides of the ship on the way to Leyte (Note the puff of smoke coming out sideways in the photo.)

A 5 degree list to port develops but is corrected by counter-flooding the 'blisters' along the starboard side of the ship, righting her to a 1 degree list. Down slightly at the bow, she continued onward. Source: IJN Yamato Record of Tabular Movement, linked on index page. This photo was taken Oct 26, 1944, when Yamato was returning home.

Thanks to Robert Lundgren for providing the date. Colorized photo courtesy of Irootoko Jr.



158. Yamato Hit by Bomb While Transiting the Sibuyan Sea, October 1944
Second photo taken seconds after the last one – note the growing size of the explosion cloud.

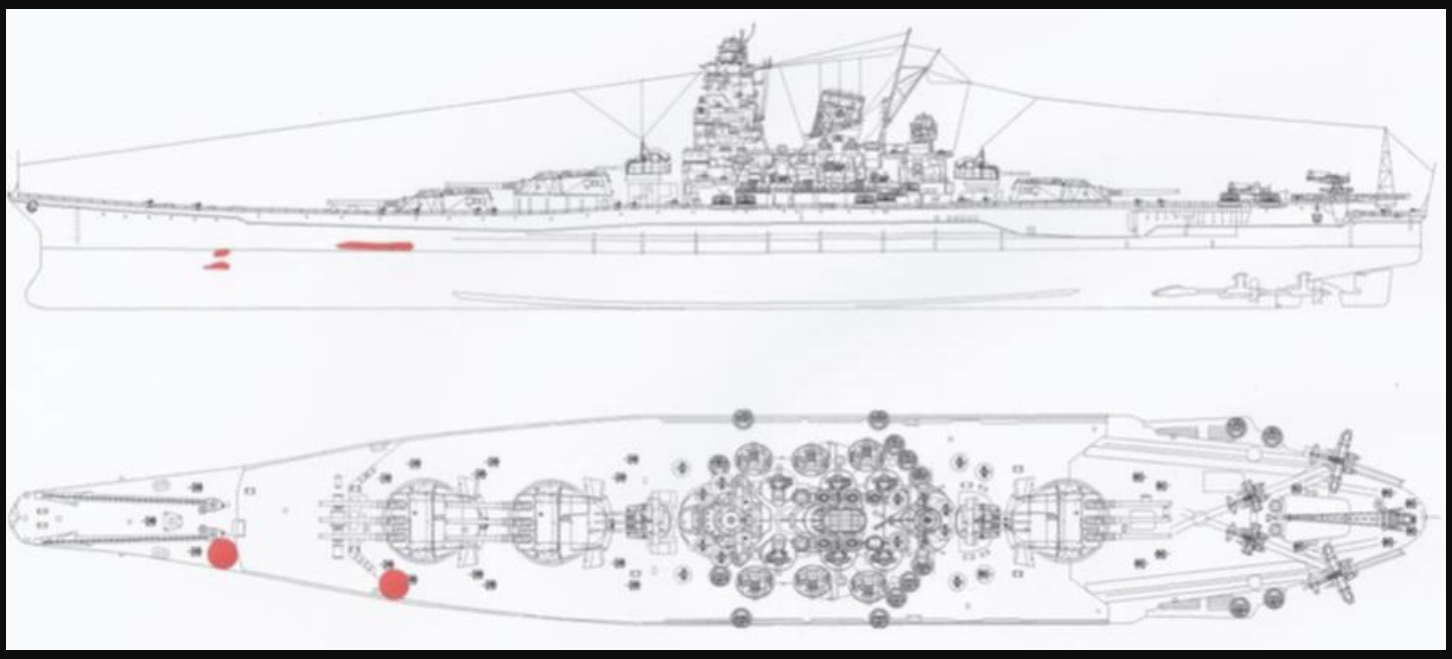
159. Battle of Leyte Gulf, 1944
Robert Lundgren writes:

"The Yamato suffered a hit on her bow at frame 33 at 1430, October 24, 1944. Note: Lt. (jg) Fellner's plane responsible for the hit appears directly above her as a black dot."

160. Battle of Leyte Gulf, 1944
Robert Lundgren writes:

"Lt. (jg) Fellner's plane withdraws while the smoke and spray from the explosion disappears. The battleship turning in the opposite direction was the Nagato. These photos are taken approximately around 1430."

161. Battle of Leyte Gulf, 1944
Yamato close-up from last photo – note Lt. (jg) Fellner's plane.



162. Diagram of Bomb Hits on Yamato at Leyte Gulf
Diagrams prepared by, and courtesy of, Robert Lundgren. (Both of these bomb hits were extensively photographed as seen on the immediately preceding pages). Lundgren writes:

"The Yamato was damaged on October 24, 1944, representing both hits occurring at 1342 and 1430 which is based on her DAR."

163. Battle of Leyte Gulf

Center Force approaching Leyte Gulf. Here Yamato is steaming towards her rendezvous with USN Task Force Taffy 3, and her sole ship-to-ship combat operation of the war. US Navy Task Force Taffy 3 was supporting the invasion of the Philippines and was not equipped to attack capital ships. It was composed of a number of light escort aircraft carriers and destroyers.

The main American fleet carriers were lured to the North by the willing sacrifice by the Japanese of their last 4 remaining carriers, which were promptly sunk, while the survivors of Center Force, including Yamato, made a feint towards returning home after the Sibuyan Sea engagement, but turned around during the night of October 24-25 1944 and broke through to Leyte.

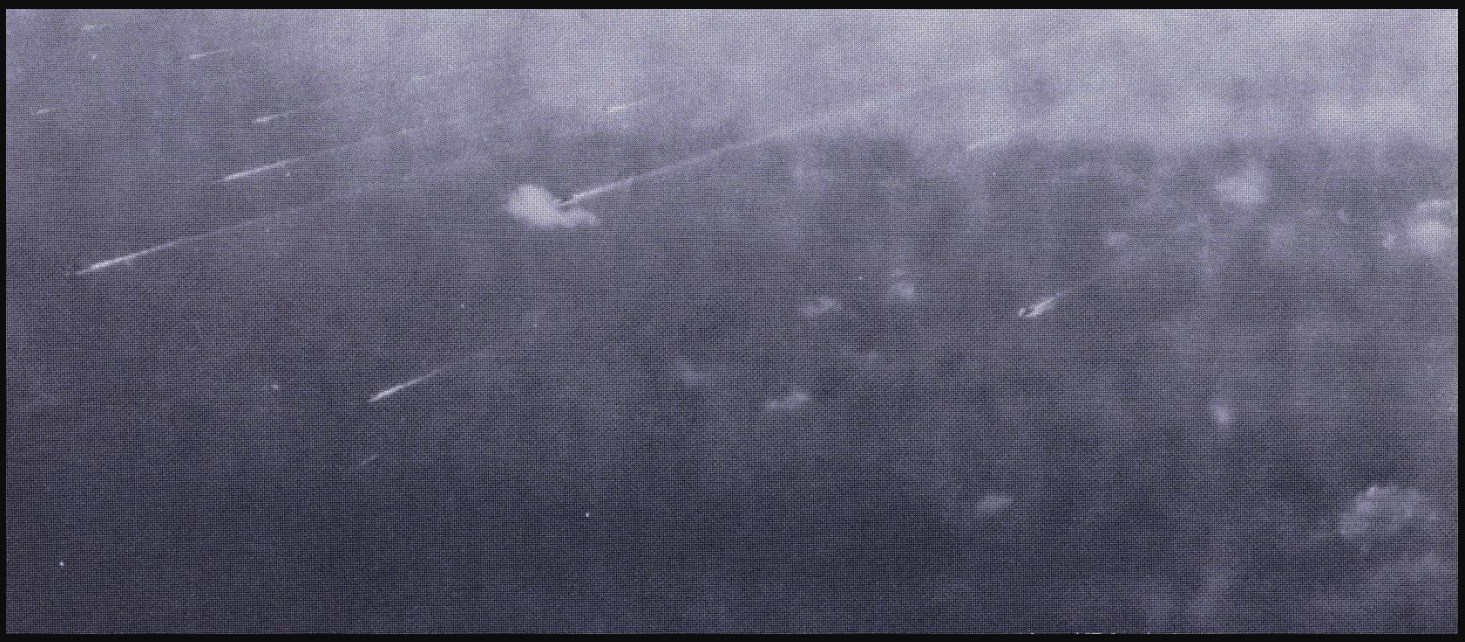
Christian van der Sanden writes:

"October 25, 1944 – The First Striking Force, with Yamato at the center, heading for Leyte Gulf off the east coast of Leyte Island. Rightmost is Nagato, second from the left is Kongo, and the leading ship is Haguro."

164. Battle of Leyte Gulf
Another view of Center Force approaching Leyte Gulf. Christian van der Sanden writes:

"October 25, 1944 – Yamato left and Nagato on the right side."

165. Battle of Leyte Gulf
Another view of Center Force approaching Samar. It is not clear which ships are visible.



166. Center Force off Samar Island, photographed by USN recon plane, Oct 1944
Yamato is at the center of the formation.

167. Moment of Reckoning - Battle of Leyte Gulf, October 25, 1944.
Yamato opens fire on Taffy 3 at the start of the Battle off Samar Island during Leyte Gulf, Oct 1944.

168. Yamato fires the first salvo of the Battle off Samar Island, Oct 1944
This is the wider photo of the start of the engagement.

Yamato opens fire with her forward 18.1" batteries early in the morning of October 25, 1944. Upon sighting the carriers and destroyers of Taffy 3 on the morning of October 25, 1944, Yamato opened up with her 6 forward 18.1" rifles at the distance of 20 miles.

According to the IJN YAMATO Record of Tabular Movement (linked at the index page):

"YAMATO's F1M2 "Pete" spotter plane confirms that the first salvo is a hit. The carrier starts to smoke. Three six-gun salvos are fired on the same target, then the fire is shifted to the next carrier. It is concealed immediately by a smoke screen made by the American destroyers."

[The accuracy of these reports, given the distances quoted, is in question - see the discussion accompanying the following photo.]

The USN destroyers stage a heroic desperate counterattack using torpedoes and 5" gun fire that quickly take two Japanese cruisers out of action (one has her bow blown off by a torpedo fired by the USS Johnston), another is hit repeatedly on her superstructure by 5" shells as she stops to assist the first stricken cruiser.) Taffy 3 planes sink a second cruiser later on during the battle.

This engagement goes down in USN lore as "The last stand of the tin-can Navy " - "tin-cans" being slang for destroyers.

The near-suicidal attacks by USN destroyers on the cruisers and battleships of Center Force save most of Taffy 3's escort carriers from destruction.

169. Yamato's shells bracket USS White Plains
The escort carrier White Plains is Yamato's first target. In this motion picture still taken from a film made from the deck of USS Kalinin Bay, Yamato's second 6-shot salvo straddles the carrier.

Yamato was the only Japanese battleship that morning that could fire a simultaneous 6-shell salvo from her forward batteries, the other battleships involved - Nagato, Kongo, Haruna having 2-barrel main batteries instead of Yamato's 3-barrel per turret configuration.

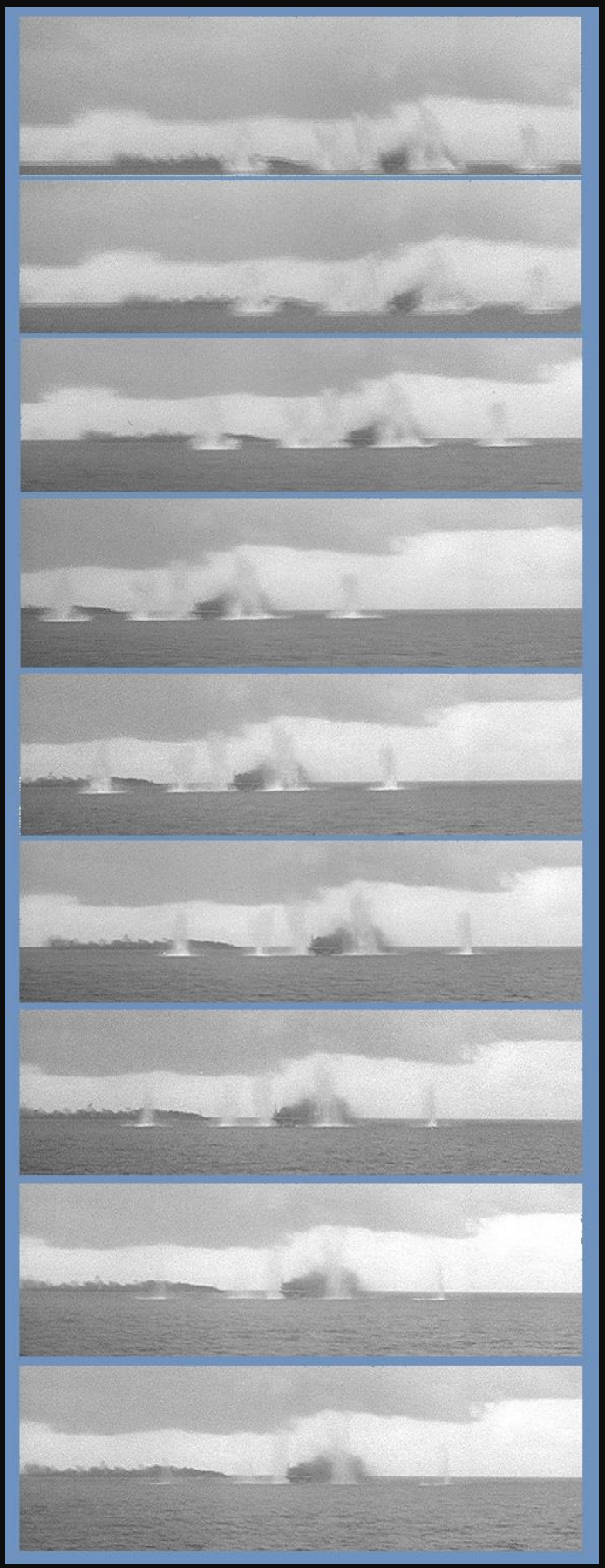
Many thanks to Robert Lundgren who kindly provided me with this still from the film which is in the National Archives.

170. Yamato's Second Salvo straddles White Plains

Yamato's second salvo brackets USS White Plains as seen from the deck of USS Kitkun Bay. Note that her planes have not taken off yet as the battle is in its early stages.

171. Yamato's Third Salvo “hits” White Plains

Yamato's third salvo brackets and (arguably) “hits” USS White Plains (see discussion below the succeeding several photos), as seen from the deck of USS Kitkun Bay. White Plains has just started making smoke – a fortuitous happenstance as it causes Yamato’s bridge to believe she has received a direct hit, so they redirect fire to the next escort carrier, possibly saving White Plains which has just been crippled and damaged by this salvo.



172. Yamato scores an arguable “hit”on White Plains with her third salvo

In this remarkable sequence captured on motion picture film from the nearby USS Kitkun Bay, White Plains is straddled again by a 6-shot salvo from Yamato.

One of these shells explodes directly under the keel of the carrier (note the forward-most splash to her port side that appears to shoot sideways and across the next geyser instead of straight up), causing her to lose power and also causing significant structural damage, including the buckling of a large 18-foot section of her bottom and cracks developing around the entire hull at that point.

She would withdraw from the battle to limp home for repairs and would be dry-docked til war's end.

This salvo, being fired by Yamato from a distance of 19.65 miles, goes down as arguably the longest effective "hit" in naval history.

As Robert Lundgren discussed in his book "The World Wond'rd", whether this is considered a "hit" or not is a bit of an exercise in semantics. Technically the shell does not appear to have made contact with the hull of the White Plains, but by detonating directly under her keel, it caused significant damage - as Japanese shells were designed to do in the event of underwater detonations. Had the shell been a high explosive shell instead of an armor piercing shell (explosive shells carried a larger charge), the detonation might have split the ship in half and sunk her. Cracks that developed over the next 24 hours all the way around the hull and keel indicate that the Japanese choice of shells may have saved the White Plains from a watery grave on that morning.

Note the USS Johnston laying covering smoke at the upper left of the photo.

Many thanks to Robert Lundgren who kindly provided me with this series of stills from the film which is in the National Archives.

Robert's website is linked on the index page, as is his definitive account of the engagement off Samar island , “The World Wond’rd”, published in 2014.

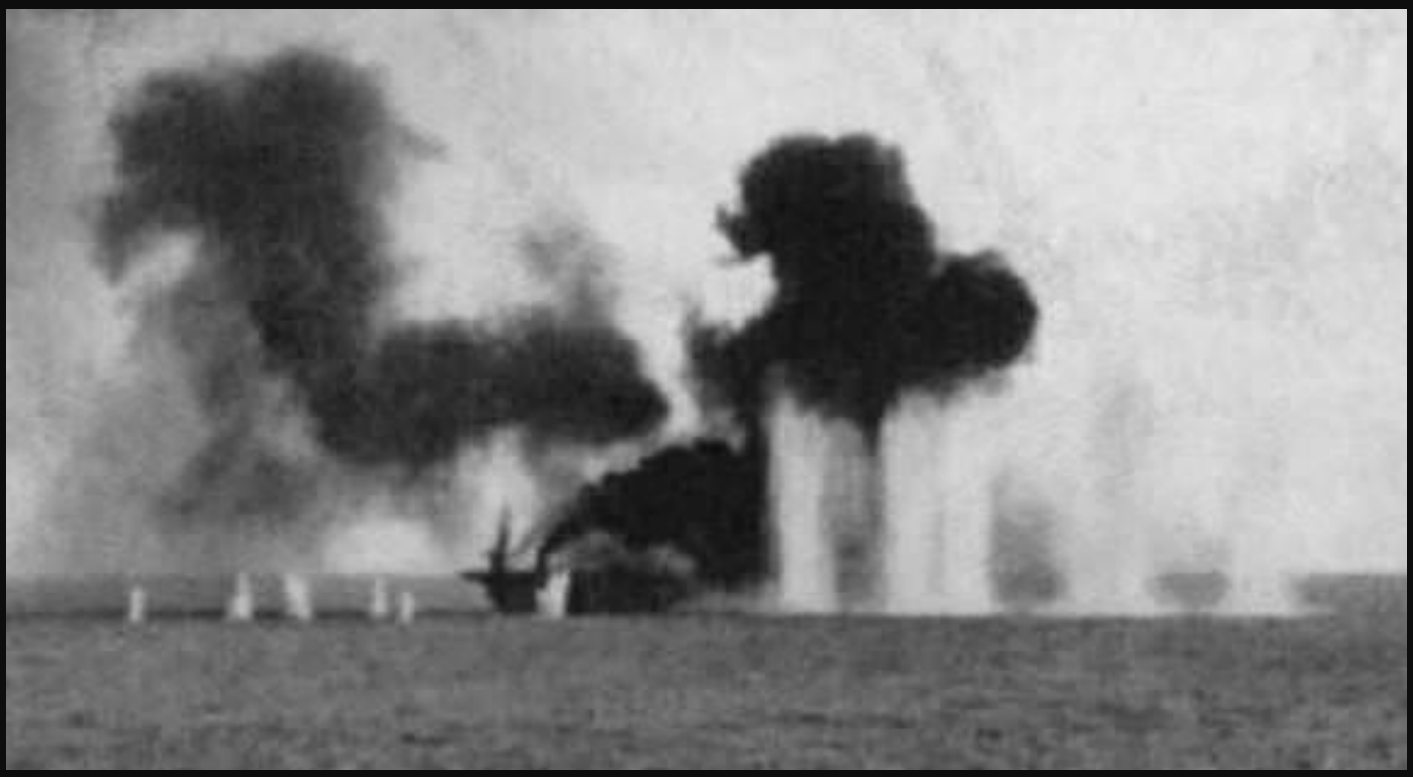
173. Photos of Damage to USS White Plains

Robert Lundgren describes the top photo in collage:

"This damage can be argued as a near miss or a hit from the Yamato ... the shell detonated beneath the hull and the resulting ... shock waves were directed up towards the ship . The eighteen-foot-long depression of bent keel plates and cracks in her sides show that the hull girder was severely compromised."

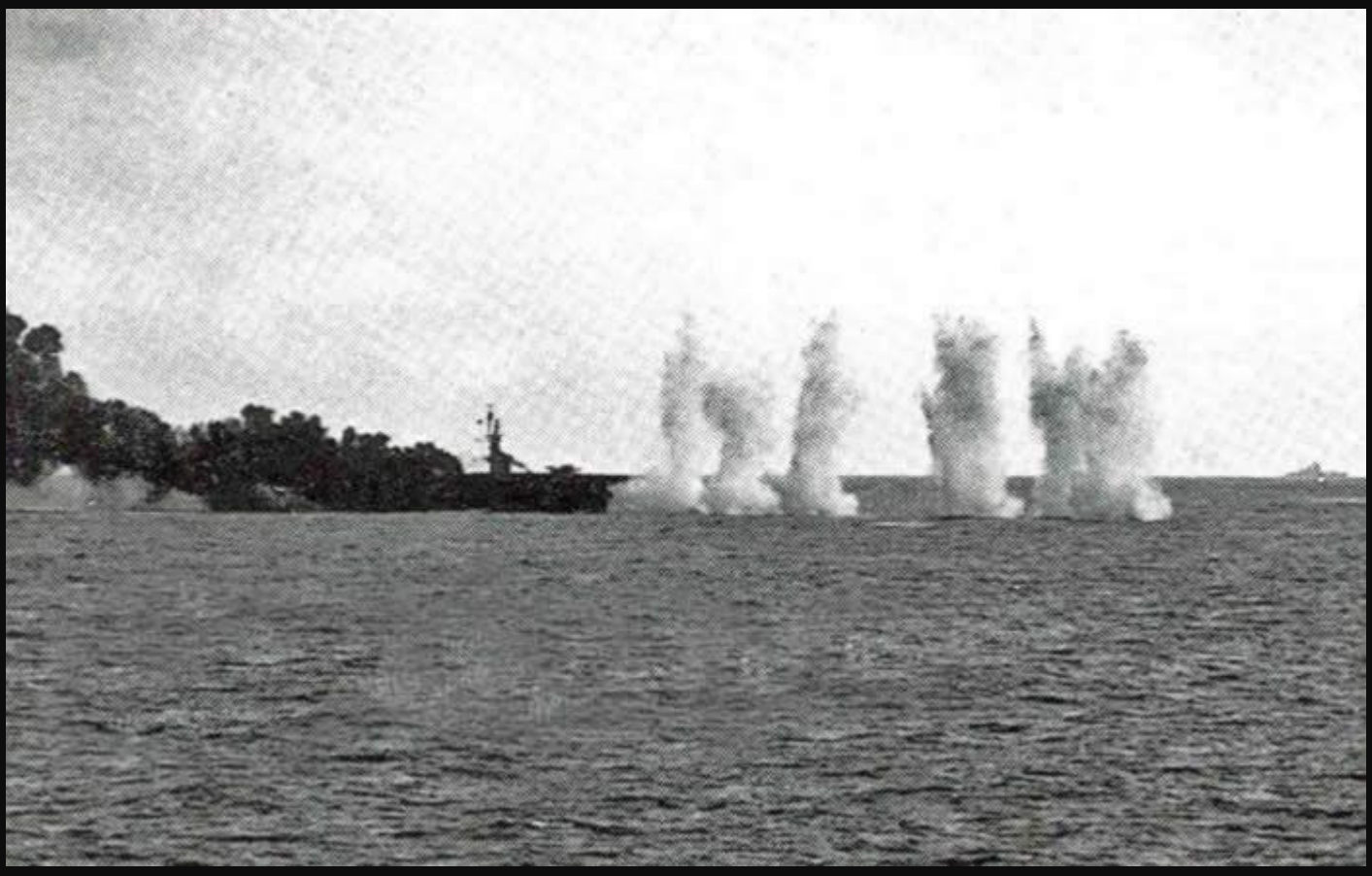
Robert Lundgren describes the bottom photo in collage:

“Cracks developed in the White Plain’s outer shell as underwater shock weakened the hull girder. These cracks continued to grow even forty-eight hours after the battle....had the explosion been powerful enough to break her keel, the ship would have broken in half along these cracks.”



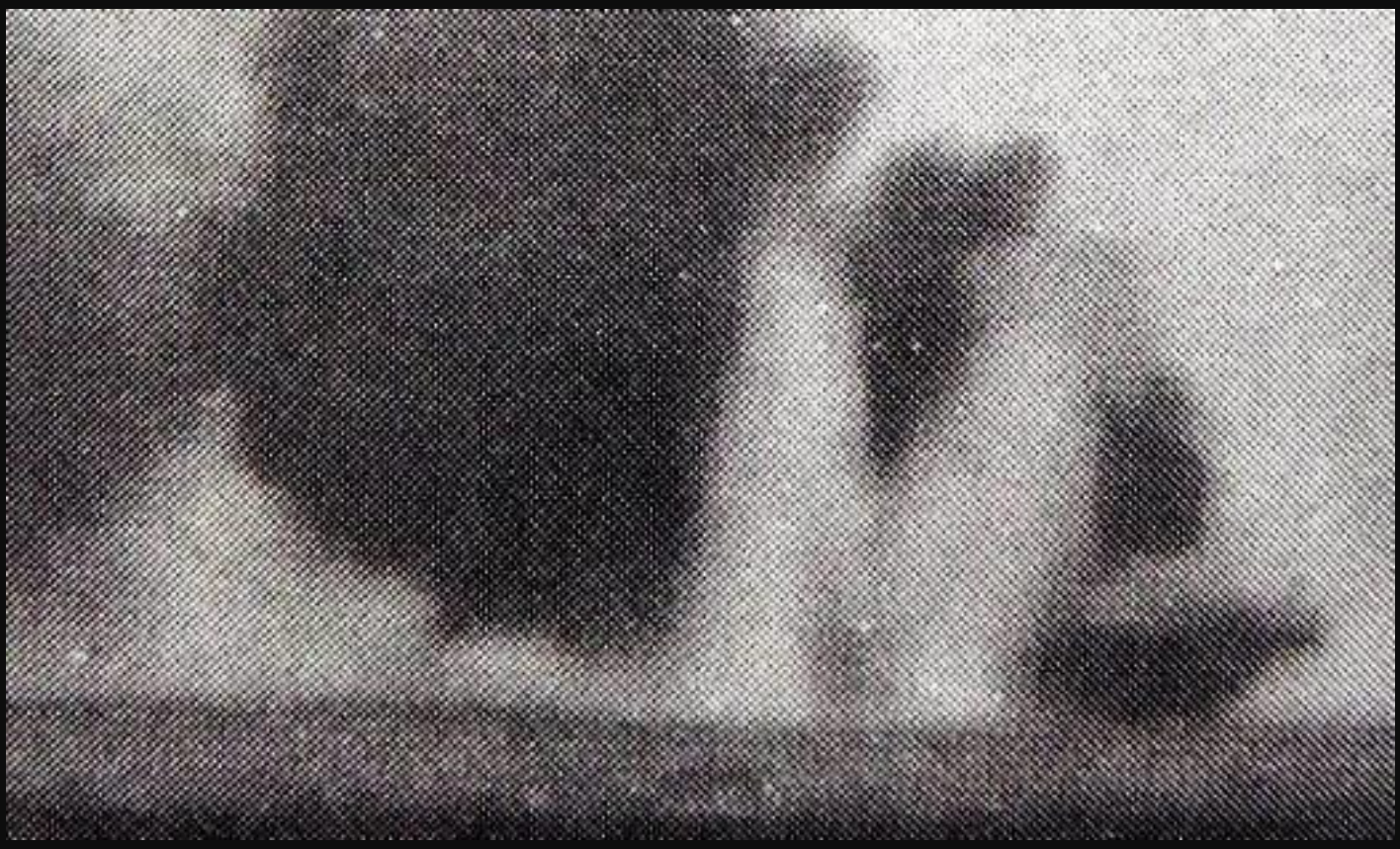
174. Yamato shells White Plains

Yamato's fourth salvo falls near White Plains. Smaller caliber shells can be seen splashing to the left of the photo. Note the difference in size of the geysers. The camo smoke she is emitting fooled Yamato’s bridge into believing she had been mortally wounded, hence they quickly redirected fire to other escort carrier targets, possibly saving White Plains as a result.



175. Yamato shells Fanshaw Bay or White Plains
Yamato's salvo falls near either USS Fanshaw Bay or possibly USS White Plains.

Note the ship barely visible on the horizon to the right of the splashes. It was long believed to be a Japanese cruiser, however, recent study of the battle by Robert Lundgren indicates that it is in fact most likely the USN destroyer Samuel B. Roberts.



176. USS Gambier Bay Under Attack
Escort Carrier Gambier Bay under withering shelling by battleships Yamato and Kongo.

177. USS Gambier Bay Under Attack
Gambier Bay under withering IJN shell fire.

178. Yamato hits USS Gambier Bay

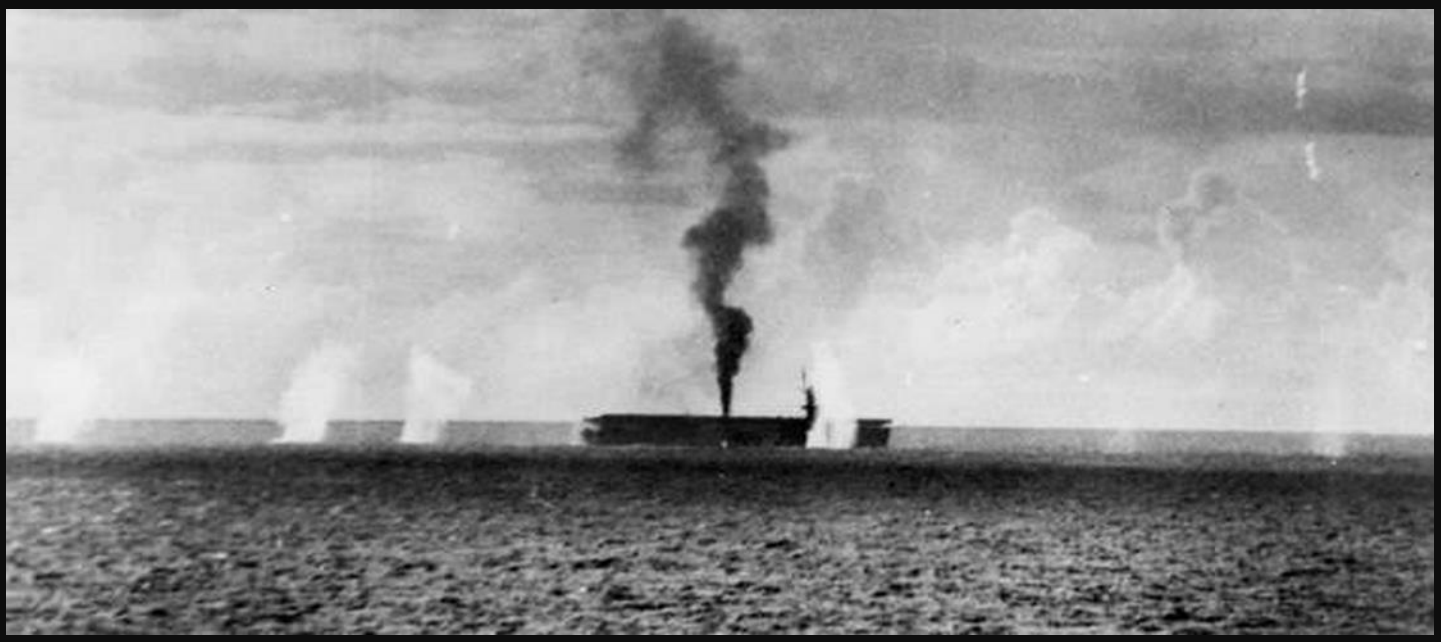
A salvo from Yamato straddles and strikes Gambier Bay. This photo appears to show the actual salvo that flooded the carrier's forward engine room and ultimately sent her to the bottom.

Fun factoid: many American sources, based as they are on earlier incomplete accounts of the battle, state that USS Hoel's torpedoes (yes, USS Hoel's , not USS Roberts') took Yamato out of the battle and that she failed to strike any USN ships during the engagement. In fact, as Robert Lundgren's definitive tome persuasively argues via meticulous shot-by-shot, ship-by-ship analysis, by the time Hoel's torpedoes forced Yamato to turn away to outrun them, she had already crippled USS White Plains, sunk the USS Johnston with her forward 18.1" batteries, and (while turning away to escape her torpedoes), sunk the USS Hoel as well, using her aft 6" battery. Johnston and Hoel were hit by multiple IJN ships, but Lundgren argues persuasively that Yamato delivered the "kill shots" on both.

The salvo pictured above sank Gambier Bay. One of Yamato's 18.1" shells sliced down the side of her engine room hull, tearing it open like a giant can opener and exploding under the ship. This salvo was delivered by Yamato AFTER she had outrun Hoel's torpedoes and had turned back to rejoin the battle. Yamato may have been rendered obsolete by carrier aircraft, but in her single surface to surface engagement, she demonstrated the capability to carry out her intended

mission of sinking enemy surface ships. She hit 4 of the ships she targeted that morning, crippling one and sinking the other 3. So much for her supposedly “not being able to hit the broad side of a barn” at Samar.

Photo taken from deck of USS Kalinin Bay.



179. The end of Gambier Bay

Gambier Bay, dead in the water minutes after the previous photo of Yamato's hit to her engine room. Note that the camouflage smoke is rising directly up, indicating that she is not moving.

She is now farther back of Kalinin Bay, from whose deck this photo was taken.

Water spouts from shells can be seen bracketing her.

180. The end of Gambier Bay
Dead in the water while shells splash all around, Gambier Bay is done for. Note the Japanese Cruiser faintly visible on the horizon on the right.

Anthony Tully writes: *“Cruiser probably CHIKUMA which led the cruiser line till 0854."*

This is a high resolution photo - make sure you zoom in.

181. The view from the deck of USS Kalinin Bay
USN sailors are startled and some dive for cover on deck of USS Kalinin Bay, as geysers from Japanese shells erupt near their ship. The shells were fired by Cruiser Haguro or Cruiser Tone towards the end of the engagement.

182. Taffy 3's escort carriers on the move, chased by Japanese shells.
USS St. Lo under attack as photographed from USS Kalinin Bay.

183. Yamato in action off Samar Island during the Battle of Leyte Gulf, October 1944.
Robert Lundgren:

"This photo was taken at 0910-0917 when Yamato is under a rather intense air attack at the very end of the action. She had to turn hard to avoid torpedoes and note the huge bow wave and smoke from her AA guns. From the look I would say she is turning now hard to starboard which is why the starboard bow wave is so huge as she pushes the water away from her hull."

184. Battle of Leyte Gulf, October 1944
Turning circles to avoid USN air attacks. Christian van der Sanden writes:

"October 25, 1944 – Yamato left and Nagato with a sharp turn to her portsides."

185. Yamato at Battle of Leyte Gulf, October 1944
As the battle continues, the destroyer USS Johnston is struck numerous times by Japanese cruiser fire but keeps fighting valiantly. The ferocity of the counterattack leads the Japanese to conclude that the American ships are cruisers. However, Johnston's time finally runs out. After firing her torpedoes at Japanese cruisers, sinking one, Johnston enters a squall, then emerges from it directly in the sights of Yamato's guns.

Yamato opens fire with her forward batteries. The very first salvo connects - Johnston is battered as three 18" shells strike her with such force that she is literally pushed into the water on her side before popping back up. The impact is later described by a crewmember as akin to a puppy being shaken in the jaws of a bulldog. A fourth 18" shell probably hit below the water line, passing through the ship without exploding. Seconds later, three 6" shells from Yamato's forward secondary battery also strike Johnston. On board Yamato Admiral Kurita cables Tokyo: "I have just sunk a cruiser!" Johnston keeps fighting with her one remaining 5" gun for another 40 or so minutes before sinking, a testimony to her designers and to the efforts of her crew. She was hit by the most powerful single salvo in Naval History, yet remained afloat for another hour. Yamato gets credit for her kill.

From IJN records: *"0651 hours: A charging cruiser emerges from behind the smoke. YAMATO engages her from a distance of more than 10 miles and scores a hit with the first salvo. The target is seen burning before it is lost sight of."*
Source: IJN Yamato Record of Tabular Movement, linked on index page.
Shortly afterward, Yamato is forced to take evasive action to avoid torpedoes launched by US destroyer Hoel, but not before delivering the killing blows to Hoel from her secondary 6" guns.

After taking 10 minutes to outrun Hoel's torpedoes, she turns back into the battle and sinks the carrier Gambier Bay with an 18" shell to her engine room, described under an earlier photo of what appears to be the exact hit described.

A note is in order here about the effectiveness of Yamato's guns.

Many dated US history accounts state that the Yamato failed to make any hits with her 'fabled 18" guns' during this, her lone engagement with American warships.

The above citations, which draw upon Japanese military records of the battle, tell a different story. Robert Lundgren' definitive account of the Battle, "The World Wond'rd - What Really Happened Off Samar", out in 2014 and available from Amazon - link on Index Page - corroborates the Japanese accounts and essentially confirms that Yamato's fire control direction that morning was truly outstanding, hitting 4 targets, crippling one escort carrier (White Plains), and sinking another (Gambier Bay) as well as the destroyers Johnston and Hoel. The latter 3 ships were hit by fire from multiple Japanese ships, but it appears almost certain from Robert's analysis that Yamato delivered the "kill shots" on all three of them.

Now for some interesting back-and-forth commentary on the effectiveness of pontoon spotter planes, of the kind used by Japanese battleships and launched from Yamato's rear dual ramps. One of Yamato's spotter planes was shot down early in the engagement, and there is no record as to whether they contributed to Yamato's targeting on that day. The

following is a commentary exchange on the subject of spotter planes that took place on Modelwarships.com in 2011 or 2012 - before Robert Lundgren's book dispelled the doubts about Yamato's gunnery at Leyte Gulf:

[Chuck: "A comment on the remarks about Yamato's fire - The IJN record which suggests Yamato scored a hit with her first 18" salvo at a distance of 19 miles, and again with her 6" guns at 10 miles, seems too good to be true. The longest range confirmed hit in naval history was scored after many tries at only 15.8 miles. Yamato's fire control would have to be vastly superior to those of any other battleship to stand a reasonable chance of scoring a hole in one at 19 miles. So far everything I've seen says her fire control equipment were good, but had nothing really exceptional. Also, hitting a destroyer with a hole in one at 17000 yards also seems beyond the capability of WWII fire control... Spotter planes observes the fall of the salvo and calls out correction back to the firing ship, and also alert the firing ship to any changes in the target's course before those changes can become clear to observers on the firing ship. So spotter planes would help improve the accuracy of each successive salvo, but will do nothing for the opening salvo."

Sauragnmon: "Much as it might easily be discredited, there are situations where raw, blind chance wins the day. Remember, the longest shot was made by Warspite, a ship that was rather long in the tooth at the time she pulled it off. Sure, the Yamato didn't have the massive uberness of using blindfire control, but she did have the spotting plane, and did have some rather good, if not screaming noteworthy, control equipment. Combine that with the fact she was in essence the Imperial Flagship, and thus likely to have the best crew they could have on board, I would lean as well in favour of the shot being a hit, even if a lucky hit.

I would beg to differ with regards to the spotting plane not having an effect on the first salvo, as they can much more effectively report things such as the target heading and speed, which combined with the element of surprise, lending to the enemy NOT shifting their heading or speed, would provide a much better firing solution on the first barrage, Chuck. If you can get the best reports of windage, heading and speed, then even your first shot is more accurate compared to a relative guess."

Chuck: "I am not inclined to believe a shot so far superior to all other shots ever documented was likely to have been made, and doubly suspicious of the claim that 2 such hits were made by a single ship in a single engagement. We can go into where Japanese fire control systems falls short, and why as a result Yamato requires very high level of crew training just to perform at par, where as the much more highly automated British Admiralty fire control table used on Warspite can be expected to perform near par regardless of crew training so long as the crew has been minimally trained, so the training and quality of Yamato's crew is unlikely to raise her fire control performance so far above that of Warspite, which despite her age was fully modernized and had the most modern fire control and the famously accurate British 15"/42 gun, not to mention the assistance of radar.

The problem with using spotter to improve the first shot is without radar or a stationary marker like a waterspout from a shell hit, an aerial observer in WWII has no means of accurately determine the speed of a ship, certainly no means to determine it as accurately as could the Yamato herself, even from 19 miles away, with her fire control optics and gunnery plotting system. The aerial observer also has no means of accurately determining the course of the enemy to anything better than "NNE" or "WSW". Again this is much less than what Yamato herself could do through her fire control plots. So no, a spotter plane will not significantly improve Yamato's chances to score a hit at long range with her first salvo. But once the first salvo is fired, a spotter can use any near miss as a reference to clock the speed of the enemy ship, can observe the pattern of the misses and call out corrections back to Yamato, and can use curvature in the wake of the enemy to alert the Yamato to enemy course changes. But keep in mind that even during this battle, the US force, such as it was, still had air superiority, and the spotter did not have the freedom to take up the most ideal position to perform her spotting work."

Sauragnmon: "If I am not mistaken, the Japanese gunnery crews were drilled heavily towards long range training. Forgive me if I am wrong, but I would imagine that they knew full well that ranges of combat was quite planned for long range, and they sought long range with Yamato, part of which was involved in the high positioning of her equipment, to optimize performance at longer ranges - this is also what made her such a target, because she was so tall in the design.

As to the commentary on a spotter plane. You have your own flight compass, so you can match, relatively, Your heading relative to the differential degree of your target. From that data, either you or the ship can then go further towards plotting the velocity of the target - If he's moving at X heading, and we know he is at Y distance, then we can derive his velocity from how far he moves within a specific time frame. If we can get an idea of the wind velocity and heading, we can take an estimate on how the shot will shift in flight - shorter, longer, directional differential. We can also take our time, relatively, because we have not, and this is the key part - we have not betrayed our position with the first salvo."

Chuck: "All major navies between wars expected and trained for battle beyond 30,000 yards, which is why everyone went through great expense to increase the elevation of their guns to beyond 35 degrees. USN, IJN, and DKM particularly had very high expectation of achieving decisive hits at those ranges. USN had expectations of 30,000 yard battles way before the Japanese, back in 1920. All three trained intensively for it. But the fact remains that those expectations were unrealistic with available technology even out to the middle of WWII. And Japanese surface fire control development effectively stopped by 1941.

By and large, the theoretical capabilities of the Japanese gunnery fire control system was equal to those of American at the beginning of WWII. But to achieve the theoretical capability was much easier with US systems than with Japanese systems. The automation in the state of the art fire control in US, British and German navies in WWII is such they can achieve near maximum performance with just a total crew of 5-6, out of which only two or three highly trained operator is needed, and these only need to do their own jobs well, and do not need to coordinate amongst themselves well. The Japanese fire control system, on the other hand, requires large staff of highly trained operator, and majority of them must coordinate perfectly to achieve maximum performance. 7 men working in perfect coordination is needed to ensure proper operation of just the fire control computer alone. At least 6 more men with great eye hand coordination is needed to manually track the ship's pitch and roll and continuously enter that data into the fire control computer where as the same function is done automatically with higher precision and reliability using gyros in the US system. So long training can only be taken as evidence that Japanese may be able to achieve world class performance when fresh and motivated, not that they could surpass it. I would say hole in one at 19 miles considerably surpasses world class performance in 1944.

BTW, Yamato's tower bridge was not particularly tall. The director on top was roughly the same height above water as those on US, German and French warships."

(Re: Spotter Planes): You have your compass, but you are not flying directly over the top of the ship you are observing, and when you are flying some distance from and at an angle to the ship you have no instrument to map the observed course of the ship to the face of the compass while accounting for parallax. So you can only estimate the enemy course by eye and experience, and by moving your eye back and forth from a slant view of the ship to a direct view of the compass, achieving a precision no better than 'South by South West'.

As to speed, you have no fixed reference. Your plane is moving, the ship is moving, the white caps are moving, there is no battleship quality fire control instrument onboard a spotter to integrate own speed and course with a optical instrument aimed at the enemy. So you basically have no better means of estimating the enemy speed then 'Damn, that's a big wake, he must be making 30 knots!'."]

186. Yamato at Battle of Leyte Gulf, October 1944
Yamato's anti-aircraft machine guns rake the water ahead of the US Navy plane.

Yamato and the other ships which engaged Task Force Taffy 3 were under constant harassment from strafing planes flying off of Taffy 3's escort carriers (which mostly carried smaller bombs for support of US forces that had landed in the Philippines. In the early battle some planes dropped depth charges in the attempt to slow the Japanese ships).

Anthony Tully chimes in with some answers to questions I posted on Tully's Port forum about Yamato's performance at Leyte, as well as her final demise (note that this discussion predates the publication of Robert Lundgren's book in 2014):

[ME: "Its worthy to add that Rob Lundgren's ongoing research may soon finally give credibility to IJN accounts of Yamato's alleged multiple hits scored at Leyte Gulf".

Tony: "I have always felt that Yamato herself scored the hits on Johnston at 0730 (while Kongo hits Hoel), and that Yamato probably scored the killing straddle on Gambier Bay that flooded an engine room. (I can't remember if Jim Hornfischer worked this into his account when sent or not). Yamato also participated in some of the finishing shots at Hoel with secondary battery. In any case, the relative positions of the ships at Samar indicate this, but proof is lacking. In any case, Yamato should probably be credited with some hits, no question. (Worked this out for "Total Eclipse" in the 1990's - maybe will post the excerpt)".

ME: "The 7 bomb and 12 torpedo hits on Yamato in April 1945 in the official Navy report are also highly suspect, as they are contradicted by both survivor's reports and USN pilots' reports, the former indicating about 18 bomb hits and 20 torpedo hits, while the latter were roughly 3 x the numbers in the final Navy report".

Tony: "That is no surprise, as that has been based on the immediate post-action DesRon 2 War Diary and report of the 2nd Fleet. I remember a series of forensic articles in `Warship' that examined a more likely truer number, oh, I think in the 1990's, maybe earlier".

ME: "As an example, the death blow delivered by 6 Yorktown torpedo bombers almost certainly resulted in all 6 torpedoes hitting almost simultaneously, as they were dropped from ridiculously close range at a 10 knot-target."

Tony: “Maybe not all six, but certainly "most" yes, as that attack is well photographed and convincing, agree. I don't recall what Garzke worked out, or even more importantly, that 1990's `Warship' study. I missed it, but its worth tracking down”.

ME: “Spurr reports them as having been dropped at a distance of 100 yards (though I wonder if it should have been 1000), while the official report lists 1-2 'probables'. Yoshida notes this explosion as being FAR more severe than any prior single torpedo hit, and correctly speculated that the bombers had taken aim at the ship's starboard exposed (due to list to port) underbelly. In any event she commenced her final roll over to port immediately after these hits.”

TONY: “Also true. As for Spurr, it may be a typo (or not, don't have info at hand)--- his work is excellent, and in the obscure matter of the sinking of Asashimo I determined by looking at the ARs involved that he used the San Jacinto report, and is paraphrasing it rather closely. So he can trusted in his general use of reports. The same goes for the famous Yorktown torpedo plane attack near the end you are talking about”.]

A note of explanation about the term "straddle": It refers to a multiple rifle shot that lands around the target without actually hitting it (ex. the Yamato's simultaneous 6 main rifle salvos at White Plains for example); a 'straddle' shot - where the rounds land around the target and explode underwater - can be more damaging to a lightly armored ship like the White Plains than a direct hit might be (because many direct hits simply passed through the American escort carriers at Samar without exploding due to the thin nature of their armor skin.)

A 'straddle shot' exploding underwater near a lightly armored ship can generate such concussion waves as to breach that ship's hull creating immediate below-the-water-line water infiltration.

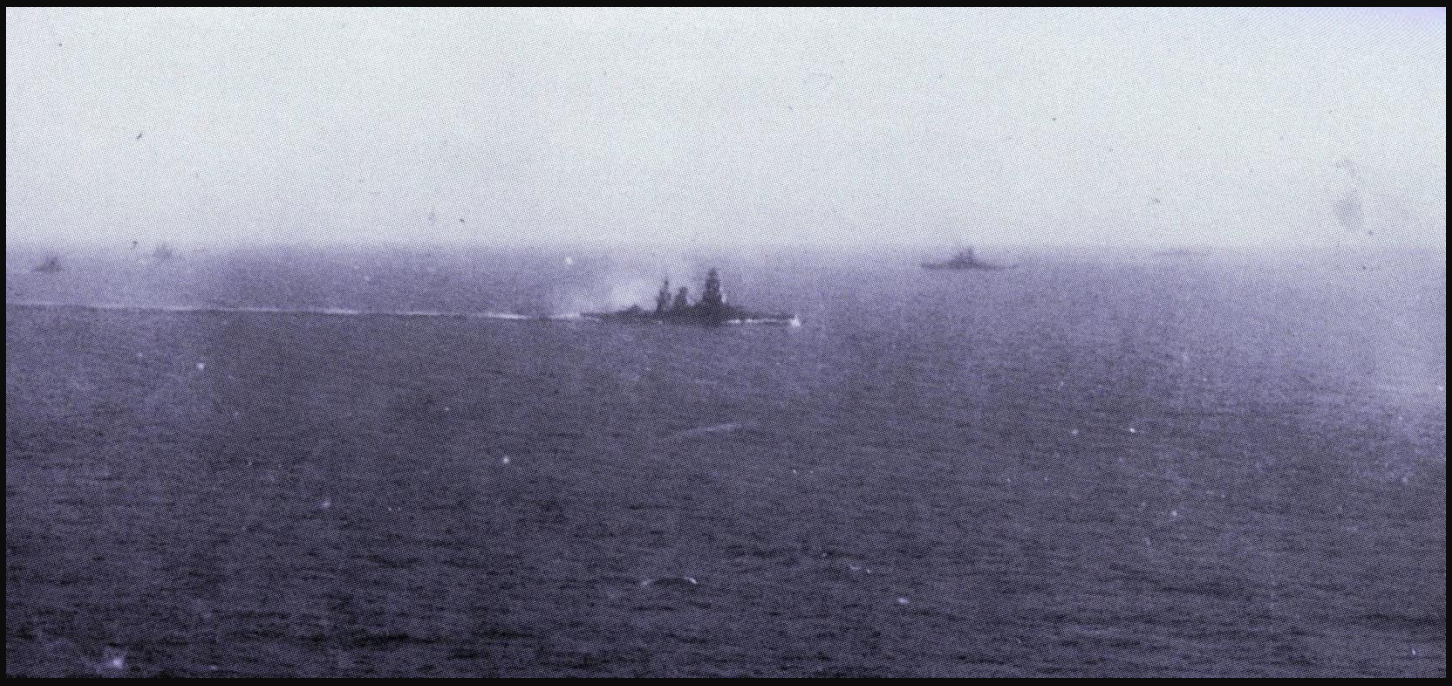
According to another source from Tully's port, the Yamato's initial two salvos 'straddled' the Gambier Bay, probably breaching her hull - and as Tony mentions above, a final straddle shot from the Yamato knocked out the Gambier Bay's steering/propellers, tearing holes open wider at the stern and dooming her. *(Note that Robert Lundgren’s 2014 book makes the case that one of the shells actually impacted Gambier Bay’s hull, tearing it open, then exploded in the water under the ship, making that a “hit” under the conventional definition.)

Despite Yamato's successes at Leyte Gulf, the entire operation - known as "Sho-go" - is a catastrophe for the IJN which ceases to exist as a cohesive force, losing all 4 remaining operational aircraft carriers, more than 400 planes, 4 battleships, 8 cruisers and 9 destroyers during the operation.

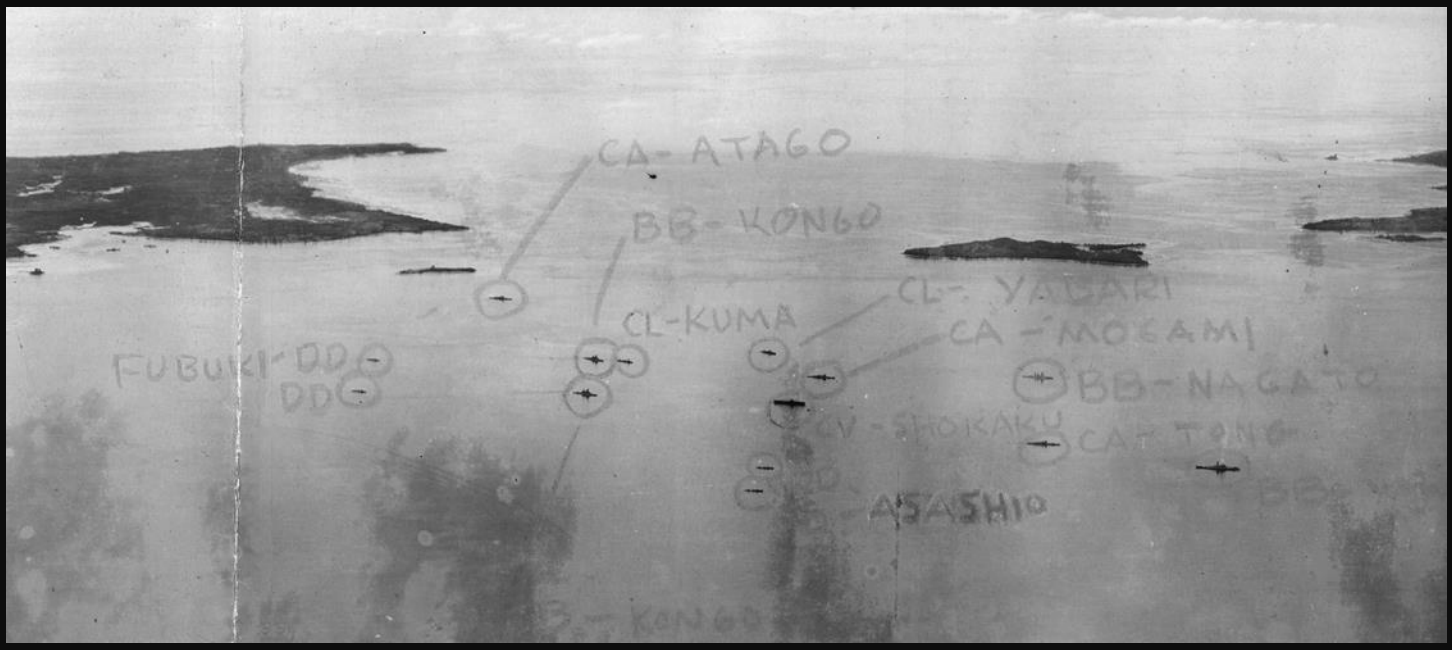
187. Yamato and a Cruiser (Tone or Chikuma) off Samar, Oct. 1944
Photo taken after Adm Kurita had disengaged his force from Taffy 3. This high resolution photo shows several USN planes swooping down towards Yamato on the right of the photo. AA flak bursts are visible in the air, as well as splashes of AA shells and machine gun fire on the surface of the water.

Anthony Tully writes: *"This photo is taken after Kurita has turned north away around 1100 am 25 October."*

188. Yamato and a Cruiser (Tone or Chikuma) off Samar, Oct. 1944
A colorized wider view of the last photo. Colorized photo courtesy of Irootoko Jr.

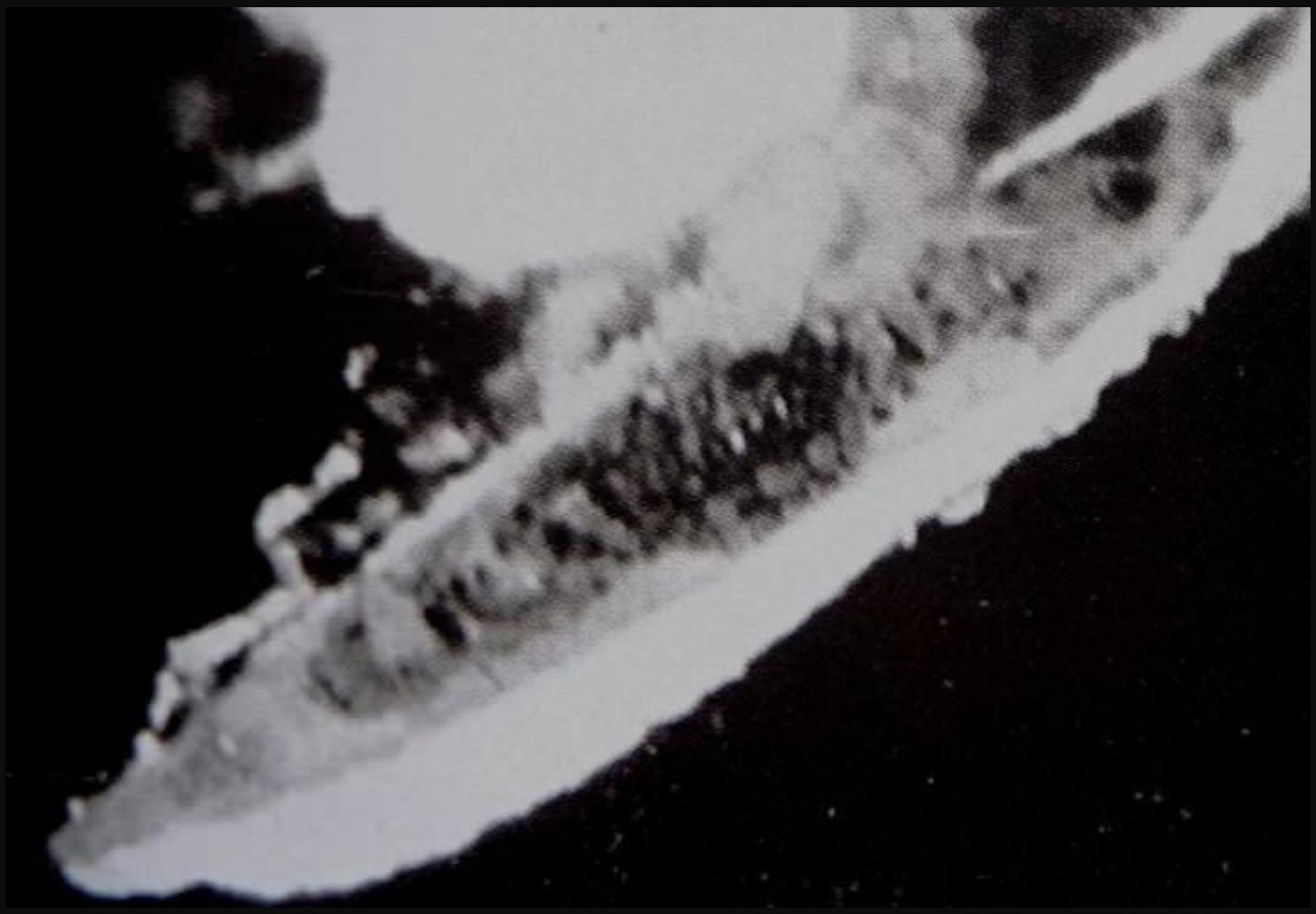


189. Yamato at Battle of Leyte Gulf, October 1944
Nagato (front) and Yamato (rear) near the end of the Battle off Samar Island, as the fleet turned North for a brief time, hoping to intercept the main American carrier fleet of Admiral Bull Halsey. After several fruitless hours with no enemy contact and fuel supplies starting to run low, the remnant of Center Force turned back towards Japan.



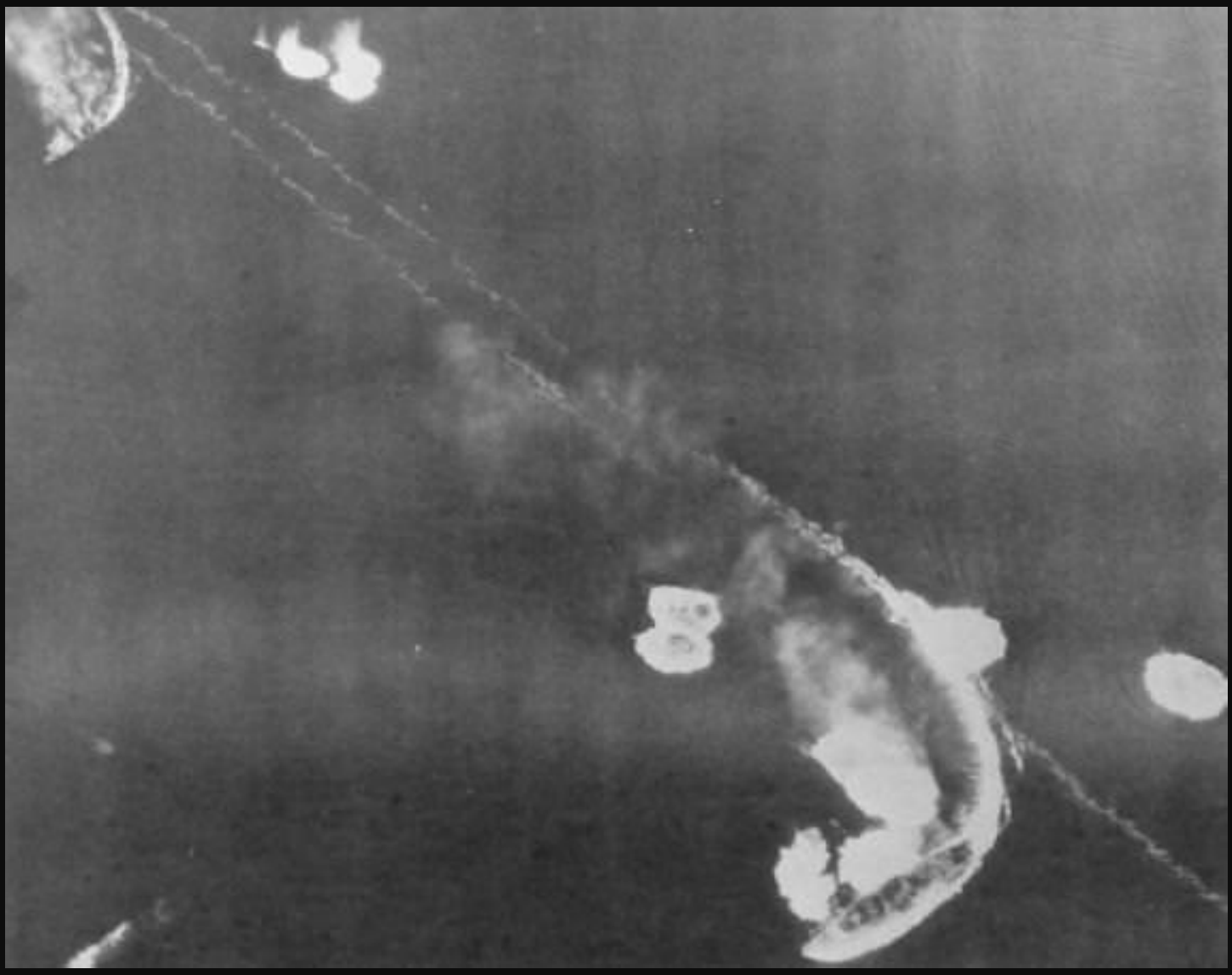
190. IJN Force A Fleet Brunei Bay Borneo NEI 7th Nov 1944

Per caption this photo was taken by a B-24 from the 90th BG. These are the remains of the IJN Center Force after the disastrous battle of Leyte Gulf. Yamato can be seen on the lower R of the photo, with the logo "BB" visible written in pencil next to it. (Note that some of the ship IDs are erroneous guesses penciled in by the original USN analysts and may signify ship type rather than individual ship ID.) Thanks to Dan K over on the Modelwarships.com Forum for this photo.



191. Yamato dodges bombs in March 1945

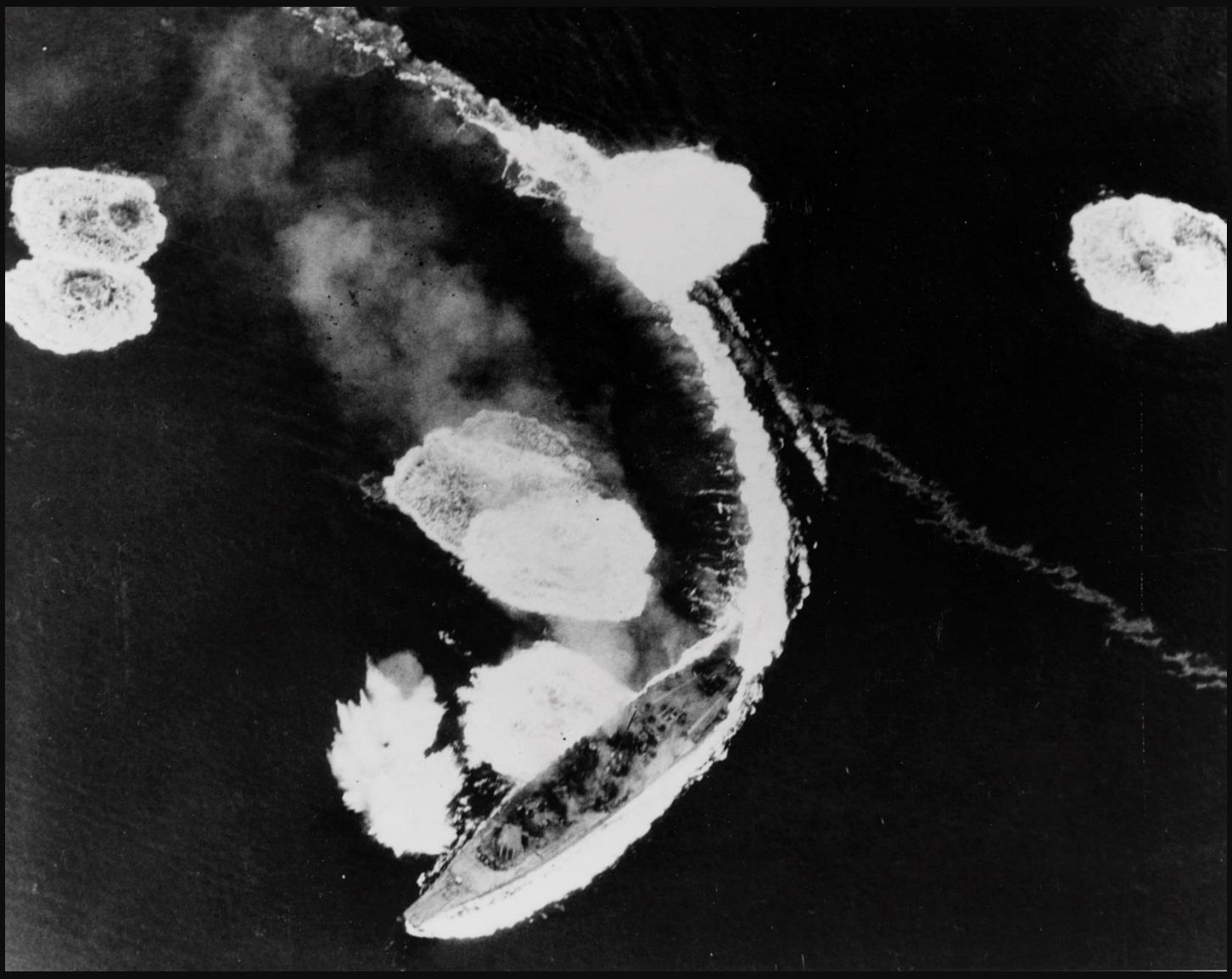
On 19 March 1945, the US Navy carrier task force executed a 'reverse Pearl Harbor attack' by attacking the port of Kure where the remainder of Japanese warships had been docked, destroying or disabling a large number of ships. By the time the attack began, Yamato was underway in the inland sea and narrowly escaped major damage. Here a bomb detonates off her starboard side as she takes evasive action at full “Battle Speed”, probably 25-27 knots.



192. Yamato Bombed in the Inland Sea, March 1945
In this second consecutive photo, Yamato is demonstrating her outstanding maneuverability, simultaneously dodging both torpedoes and bombs. Note the torpedo wakes behind her.

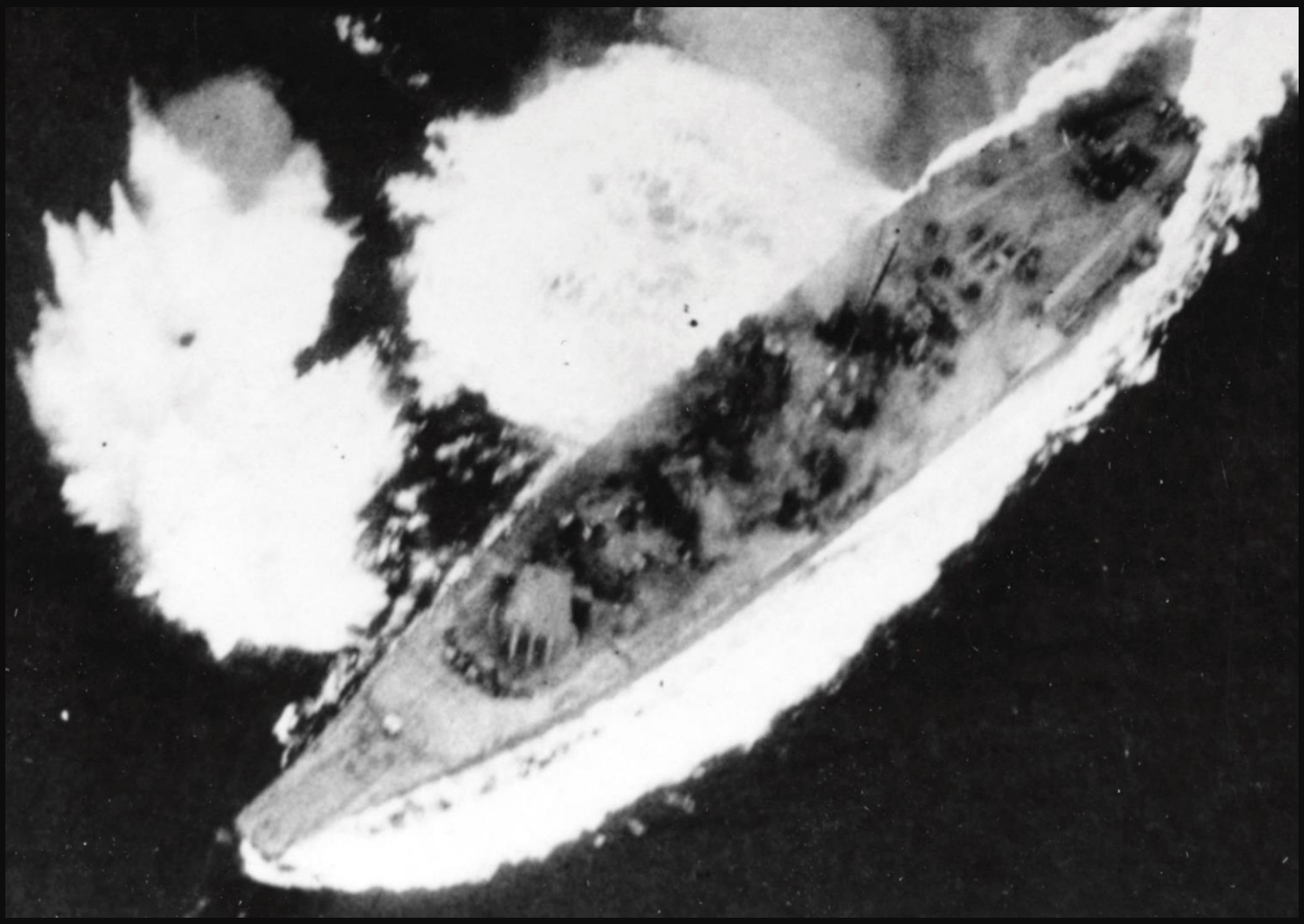
A smaller ship, likely a destroyer, has been hit by bombs and is burning in the upper left corner of the photo.

This photo also illustrates the remarkably tight turning radius of Yamato (and Musashi). For 880 foot long, 73,000 ton battlewagons, they could practically "turn on a dime".



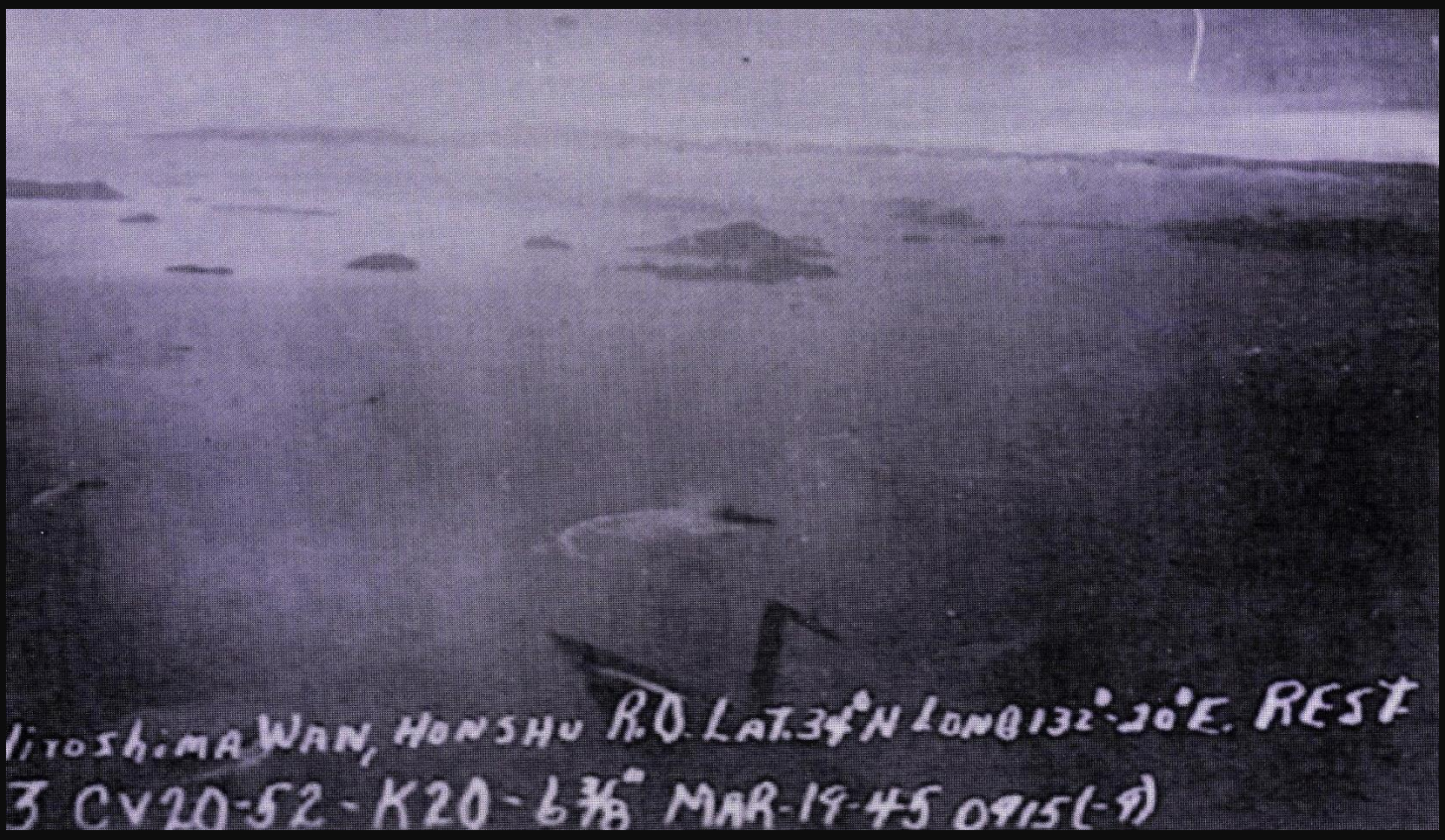
193. Yamato Bombed in the Inland Sea, March 1945
A higher resolution, larger version of the prior photo.

194. Yamato Bombed in the Inland Sea, March 1945
This high resolution close up of the previous photo reveals deck details such as additional AA gun emplacements on the aft deck and stern.



195. Yamato Bombed in the Inland Sea, March 1945

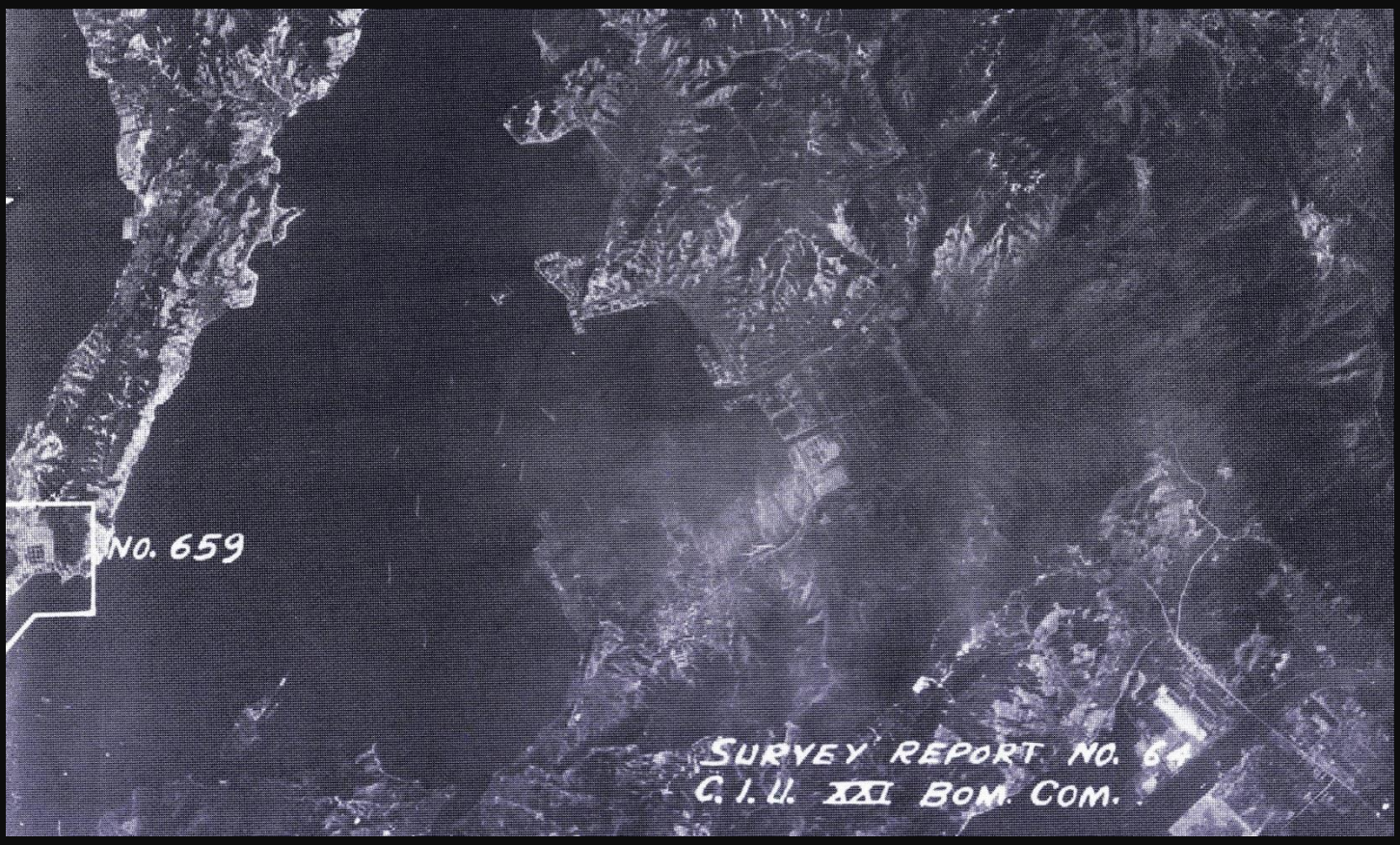
A high resolution version of the prior photo with slightly different shading shows more details. Note that the crane mast at the rear of the ship is missing (removed to allow the main #3 rear turret an unobstructed range of fire). The crane itself remained operational for lifting float planes from the hangar and placing them onto the catapults. The antenna wires originally attached to the crane mast were re-attached to the antenna mast atop the aft secondary 6” gun battery.



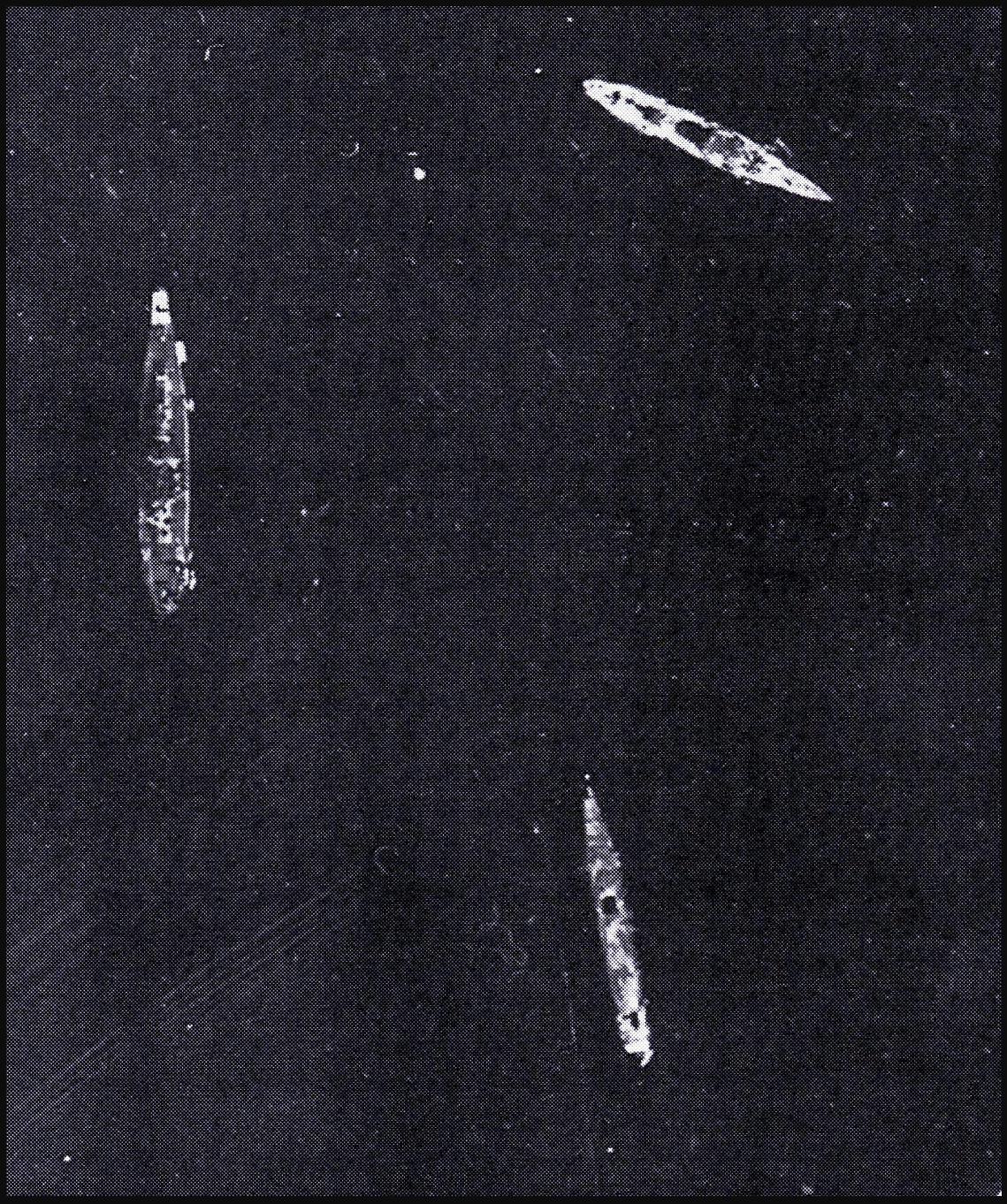
196. Yamato Being Bombed, March 1945

197. Yamato Being Bombed, March 1945

In 2024, a short color film was unearthed in the US National Archives of the Kure bombing attack by USN carrier planes on 19 March 1945. This still from the clip shows Yamato narrowly escaping a USN bombing run. The photo has been authenticated by the Yamato Museum as matching the bombing run photographed directly overhead by another high altitude USN observation plane. (See the immediately preceding series of photos).



198. USN Recon photo of Kure taken on 20 March 1945, the day after the bombing attack
Yamato and other ships are visible at center. See next photo for closeup view.

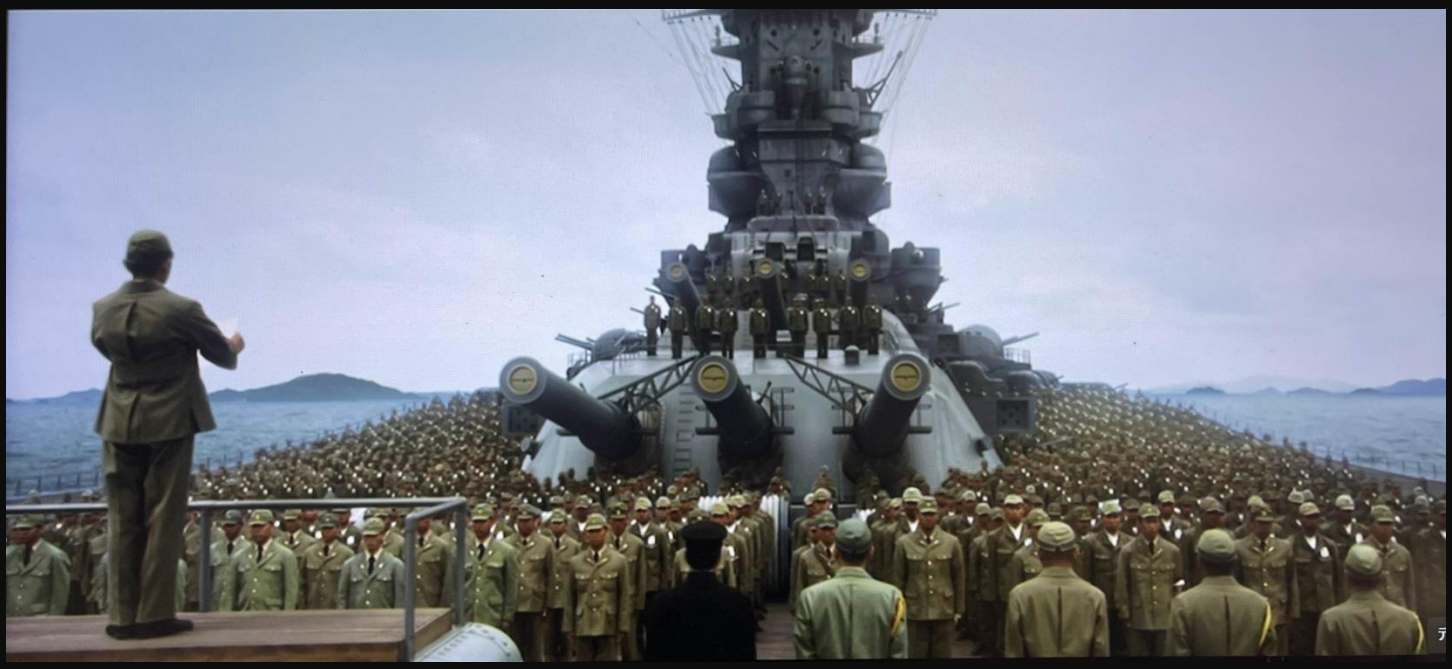


199. USN Recon photo of Kure taken on 20 March 1945, the day after the bombing attack
Ships visible according to Japanese sources are the Battleships Yamato and Huyga at the top, and light carrier Ruyho at bottom.

200. Preparations for Operation Ten-ichigo begin in March 1945 at Kure.
Yamato, Yahagi and several destroyers are visible in this photo of the Port of Kure, taken by a B-29 recon plane on March 28, 1945. Photo courtesy of Anthony Tully.

Christian van der Sanden writes*:*

"March 28, 1945 – Yamato at the center. Hyuga above her left, the Ryuho above her right, above Ryuho top of the photo is the Haruna. Bottom hard right is the Amagi."



201. Assembly at Dusk, March 30, 1945 from the 2005 Japanese film "Men of Yamato".
The crew is briefed about the upcoming mission:

"We muster at quarters. All hands line up on deck in fatigues. In the night, dark under blackout, the breathing of 3,000 men grows still.

The captain states the aim of the Ten'ichigo plan - to counter the American landing on Okinawa - and the mission of this vessel - to be the mainstay of the task force making the sortie; he voices his earnest hope that the men will all rise to the occasion and live up to the expectations of the entire navy.

The executive officer: 'The time has come. Kamikaze Yamato, be truly a divine wind!'"

Yoshida Mitsuru, "Requiem for Battleship Yamato"

Such empty exhortations aside, all of the 7000 sailors of this task force knew that they were being given a one-way ticket to their deaths.

Awaiting the Yamato and her 9 escort vessels near Okinawa were no fewer than 60 American warships, which included 12 aircraft carriers and 6 battleships.

Worst of all, with nearly all of the Japanese aircraft slated to take part in simultaneous Kamikaze missions against the American fleet, the Yamato task force received no air cover. In any event such cover would have quickly been shot out of the sky by the, by then, far more skilled US Navy pilots flying superior fighter aircraft.

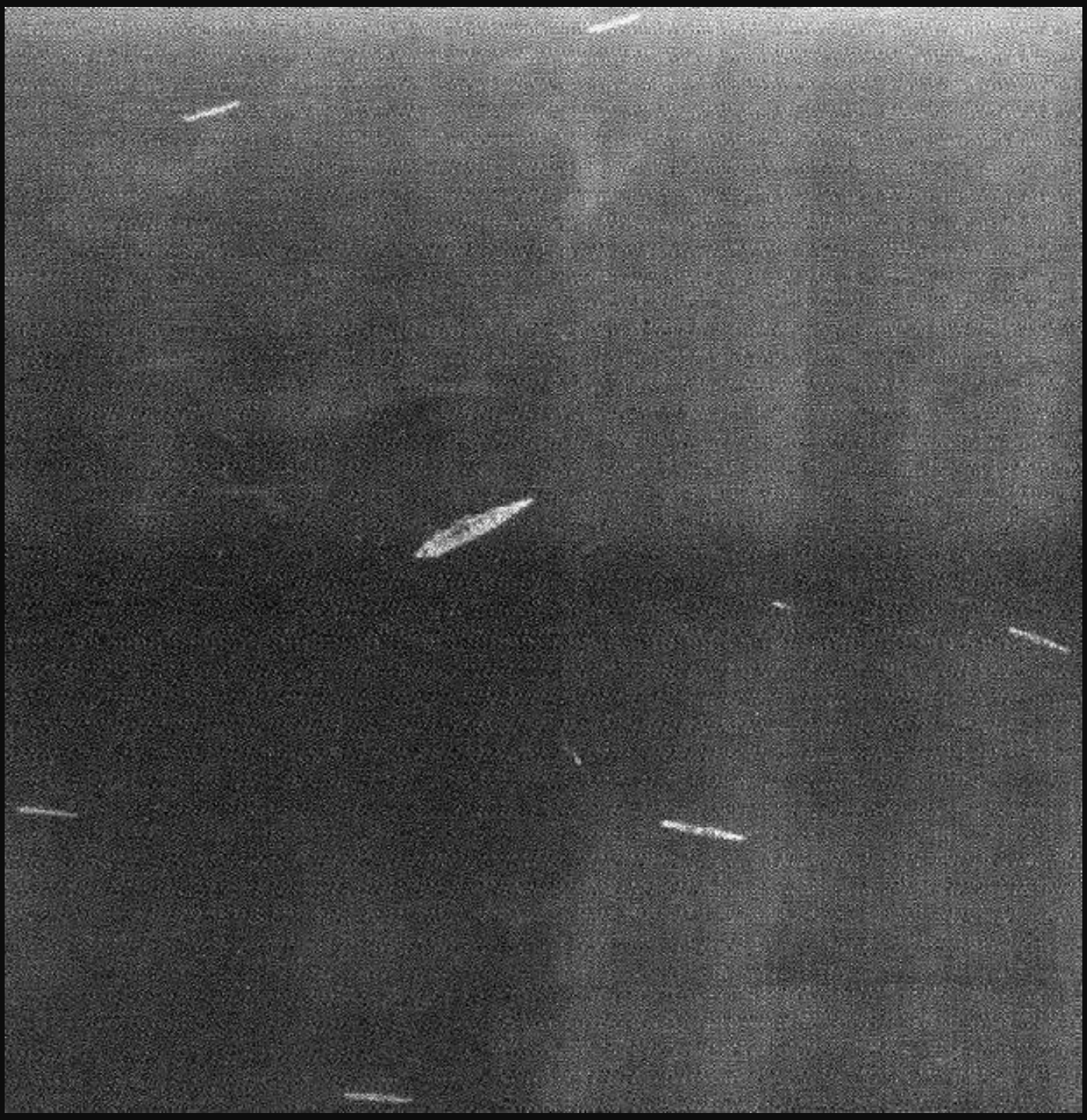
As Yoshida notes in his memoir, not one of them ever thought they would ever set foot on Japanese soil again.

202: Left-to-right:

1. Ensign Yoshida (author of "Requiem for Battleship Yamato")
2. Rear Admiral Ariga, Captain of the Yamato during her final mission
3. Vice-Admiral Ito, Commander of the Yamato "Special Attack Force", Operation Ten-ichigo, 6-7 April, 1945

203. Operation Ten-IchiGo April 6-7 1945

January 1945 – Commander of the 2nd Fleet Admiral Seiichi Ito on the starboard side of Yamato´s anchor deck. Ito was Vice Admiral until his death on Yamato´s last mission, but was posthumously promoted to Admiral rank. Photo and caption provided by Christian van Der Sanden.



204. Operation Ten-ichi-go, April 6-7, 1945
A recon photo taken by a B-29 at precisely Noon, April 6, 1945, discovered in 2005 in the National Archives.
Yamato is in the middle, with the light cruiser Yahagi and 5 out of her 8 destroyer escorts clearly visible forming a ring around the ship.

They would leave on their final suicide mission a mere 4 hours later.

From the US Navy summary of the operation: *"Soon after Okinawa was invaded on 1 April 1945, the Japanese implemented a desperate effort to destroy the fleet supporting the landings. Designated "Ten-Go", this operation largely consisted of massed "Kamikaze" suicide plane attacks. However, the battleship Yamato, largest surviving ship of the*

Japanese Navy, was also to play a role, steaming down from the home islands to blast invasion shipping off Okinawa's western coast. This mission was also understood to be suicidal, with only enough fuel provided for a one-way cruise. Yamato and her consorts, including the light cruiser Yahagi and eight destroyers, left port in mid-afternoon on 6 April 1945, the day that the "Ten-Go" suicide planes began their all-too-horrible onslaught. While exiting the Inland Sea, the ships were twice sighted by U.S. submarines, and were again seen by a carrier search plane in the morning of the 7th.*

U.S. Navy carriers launched nearly 400 aircraft to hit the oncoming Japanese ships. Six U.S. battleships prepared to intercept the Japanese, in case they somehow got past the overwhelming aerial force. The Yamato group was provided with no air support, so the U.S. planes were opposed only by generally ineffective anti-aircraft gun fire."

*My note: Subsequent research has proved this claim to have been a myth. Yamato and her escorts did indeed have enough fuel for a round-trip voyage, although even many of her crew were unaware of this fact.

205. Operation Ten-ichi-go, April 6-7, 1945

Close-up of a remarkable high-altitude recon photo taken by a B-29 at precisely Noon, April 6, 1945, that was discovered in 2005 in the National Archives. The photo shows the ship's final deck AA gun configuration as well as other features. Note the ships moored alongside delivering men and supplies.

The ship would leave on her final suicide mission a mere 4 hours later.

Both Vice Admiral Ito, the task force commander, and Rear Admiral Ariga, the Yamato's captain, were so strongly opposed to the "special attack" (suicide) mission - Operation Ten-ichigo - that they risked being relieved from duty. In the end, however, they carried out their orders, and ultimately went down with the ship.

The most insane kamikaze mission of the war occurred because of a chance comment from Emperor Hirohito; while being briefed by his Army and Navy Chiefs of Staff on the upcoming air and land defense of Okinawa, he turned to Admiral Toyoda, and remarked *"Where is the Navy? Have we no more ships?"* Toyoda reassured him that the Navy would participate in the defense of Okinawa. Yamato's fate had been sealed.

Thus the Navy's brass hatched the plan to send Yamato, light cruiser Yahagi, and 8 destroyers to near-certain destruction in a vain attempt to engage the American landing fleet off Okinawa – without any air cover to protect them.

Vice Admiral Ito was only persuaded to drop his opposition when Vice Chief of the IJN, Admiral Kusaka, flew to Yamato on a float plane and briefed them on the operation. The Yamato, he said, would divert American air forces away from the thousands of kamikaze planes that would be unleashed against the American Fleet from bases on Okinawa.

Thus the greatest battleship ever built was reduced to nothing more than the world's biggest decoy.

Kusaka added: *"Your sacrifice will herald the sacrifice of 100,000,000 Japanese."*

Those who think that President Truman should not have dropped the A-bombs ought to ponder that last remark. The Japanese had prepared their population and home forces to fight to the death - even if it meant the death of every single Japanese. Dropping the A-bombs saved far more Japanese lives than American ones by preventing the need to invade Japan in September 1945 (the month for which the invasion had been scheduled). US estimates of casualties in an invasion of the Japanese home islands - based on the experience of Okinawa - were 500,000 US casualties and upwards of 3 million Japanese casualties.

The new President, Harry S. Truman, only learned of the existence of the A-bomb after FDRs death in April 1945, and then had to make the difficult decision whether to use this devastating weapon against Japan's cities. As he pondered the A-Bomb's use, Secretary of War Henry L. Stimson asked him a pointed question at a cabinet meeting: *"What will you say at your impeachment trial in the Senate in 1946, Mr. President, when you are asked why, having this weapon, you decided not to use it?"* In the end, the experience of Okinawa invasion was enough to make the decision for him.

206. Operation Ten-ichi-go, April 6-7, 1945

The Yamato Task Force is sighted by US Navy scout flying boats on the morning of April 7, 1945. Yamato fires a salvo of 18.1" "San-shikidan" AA shells at the flying boats, but misses. Admiral Ito then directs that the ship change its zig-zag course and steam straight for Okinawa at full speed, as any element of surprise had just been lost.
The discussion about the upcoming mission among the younger officers on Yamato in the week prior to Operation Ten'ichigo had been heated, as Yoshida relates:

"The young captain of one of the destroyers grilled Admiral Kusaka's entourage: if, as the parting words of the chief of staff of the Combined Fleet indicate, the power of the Imperial Navy is really to be marshaled for this one battle, 'then why doesn't Admiral Toyoda himself venture out from his bunker at Hiyoshi and assume direct command?' He was voicing the innermost thoughts of the entire crew of this special attack force.

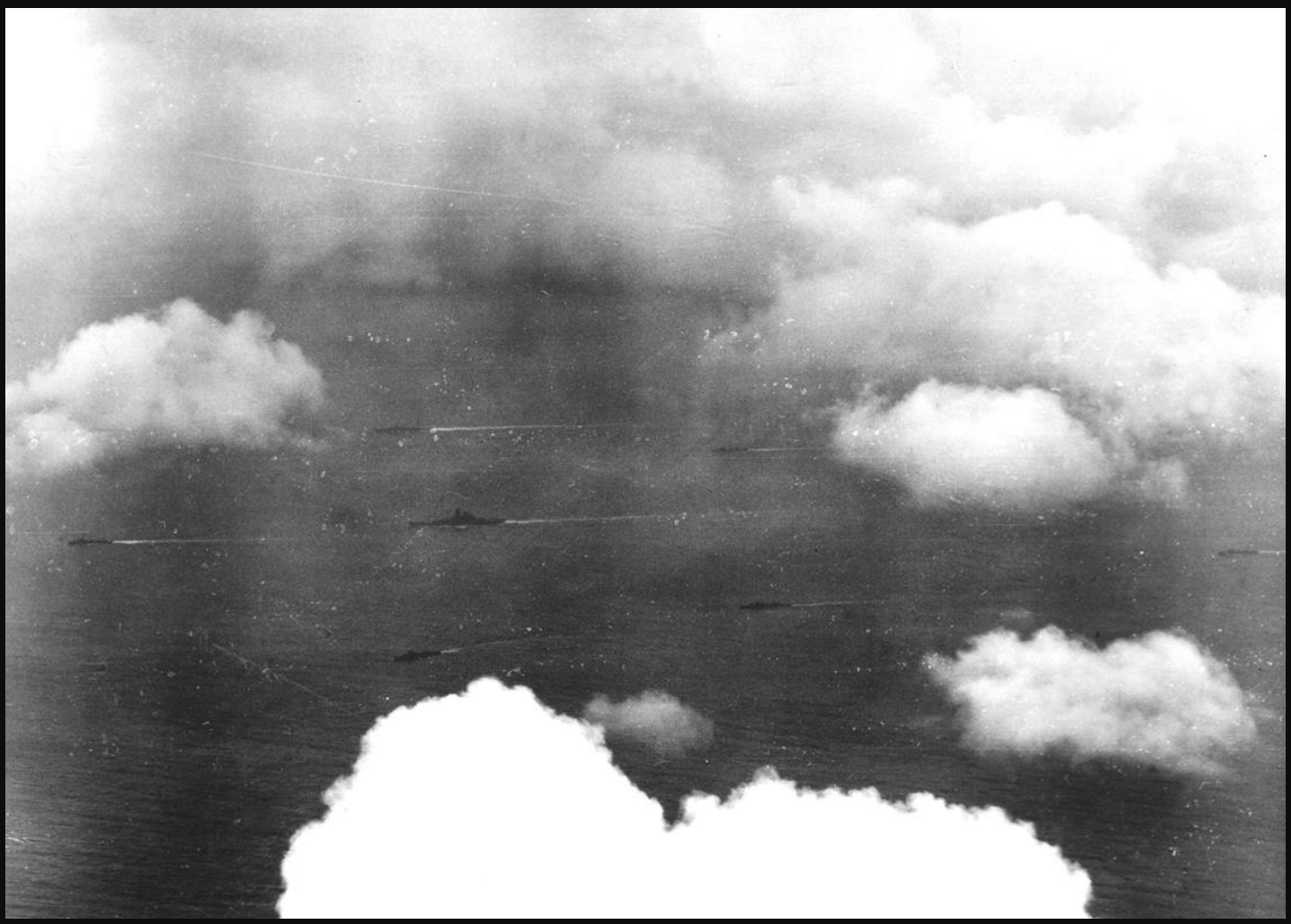
What are the prospects for Operation Ten'ichigo? The vehement debate among the officers continues. Those arguing that it can only fail are in the overwhelming majority.... In addition: doubts...that we will be as vulnerable as a man

walking alone on a dark night carrying only a lantern;.. ..that midway we will fall victim to airborne torpedoes. (This prediction, subscribed to by a large number of the young officers, will prove to be precisely on the mark.)

Against this sharp contention that the mission is doomed to fail, chief officer of the watch Lieutenant Usubuchi..binoculars fixed on the sea at dusk, speaks in a low voice, almost a whisper: 'The side which makes no progress never wins. To lose and be brought to one's senses: that is the supreme path. Japan has paid too little attention to progress. We have been too finicky, too wedded to selfish ethics; we have forgotten true progress. How else can Japan be saved except by losing and coming to its senses? If Japan does not come to its senses now, when will it be saved? 'We will lead the way. We will die as harbingers of Japan's new life. That's where our real satisfaction lies, isn't it?'

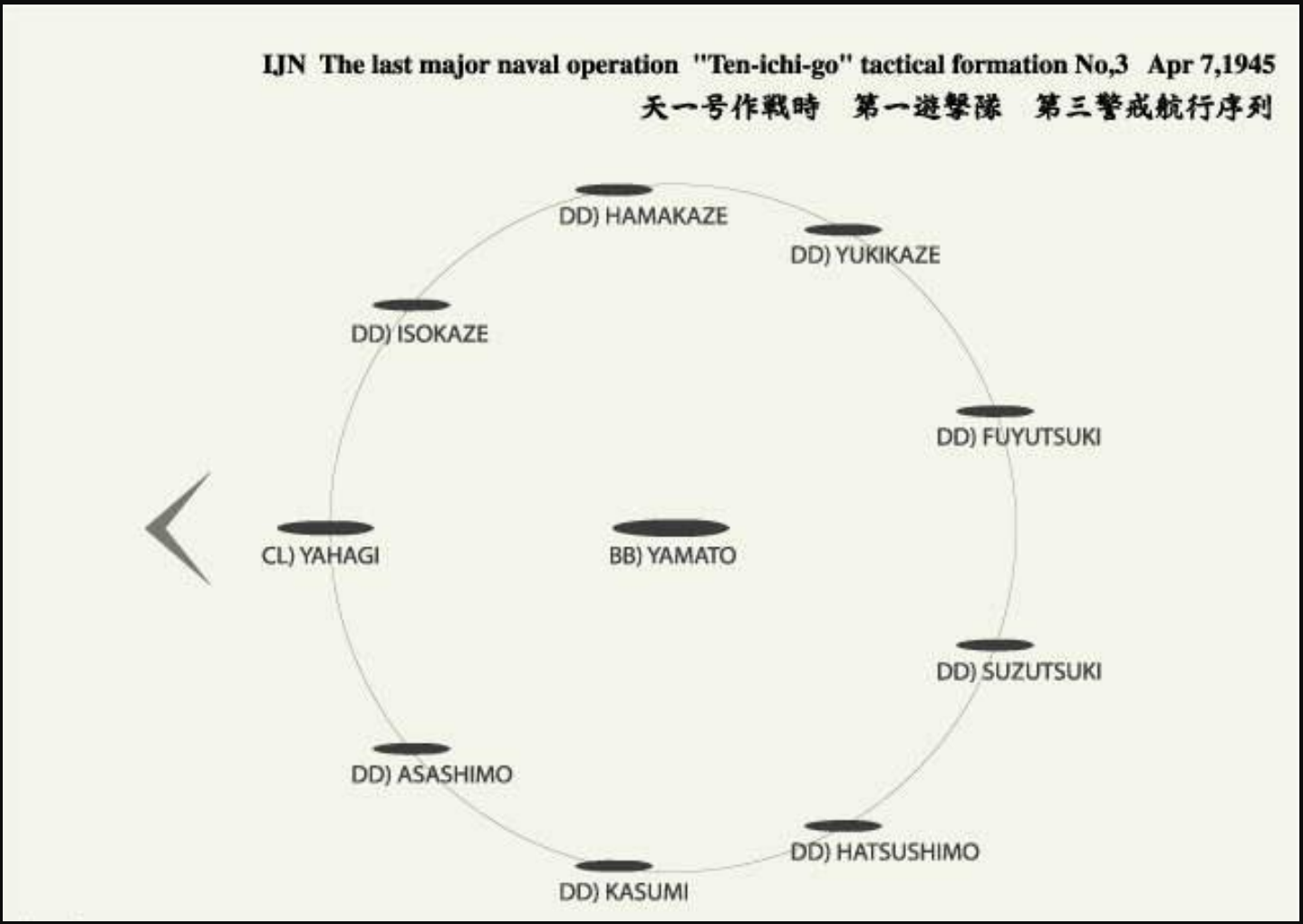
Lieutenant Usubuchi's firmly held opinion becomes the general conclusion of the serious discussion continuing day after day in the wardroom. No one is able to refute it."

Yoshida Mitsuru, "Requiem for Battleship Yamato"



207. Operation Ten Ichi Go April 6-7 1945

Per Navy caption under photo, this shows the Yamato Task Force shortly before attack by USN planes on 7 April 1945. Photo taken from a USN recon seaplane. Yamato is in center, with Yahagi (misidentified as another cruiser in the USN caption) off her starboard beam with destroyers making up the rest of the formation.



208. Operation Ten-ichi-go, April 6-7, 1945
Yamato Task Force formation, April 7, 1945. Diagram courtesy of Irootoko Jr.

209. Operation Ten Ichi Go April 6-7 1945

Recently (2023) ID'd color photo of the attack on Destroyer Asashimo, the first ship to be attacked and sunk by the USN planes during Operation Ten-ichi-go. Here she is apparently firing her forward main battery at the planes and is still underway as her wake is clearly visible.

Destroyer Asashimo lagged miles behind the Yamato Task Force on the morning of April 7, 1945 due to engine trouble. Eventually however, according to Anthony Tully, she repaired her engine problem and had almost caught up with the rest of the task force, just to the North, when she was attacked by USN planes. Her last transmission : *"Engaging 40 enemy planes."* None of her crew would survive her sinking.

210. Operation Ten Ichi Go April 6-7 1945
Photo courtesy of Anthony Tully who writes:

"This VB-84 photo shows Asashimo coming to a stop just after the fourth wave attack. The large volume of white streaming forth appears to be steam from a destroyed boiler. It soon dissipated, though while it lasted it appeared to actually interfere with her own anti-air defense from amidships aft. The Helldiver pilots remarked on a relative lack of AA fire after the second wave, and only near-misses had occurred till then, though the destroyer was fiercely strafed."

211. Operation Ten Ichi Go April 6-7 1945
Photo courtesy of Anthony Tully who writes:

"This is how Asashimo appeared at the end of Air Group 84's attack in the 1245 hours range. Clearly dead in the water, but otherwise in fair shape. White steam vapor is still venting from the damaged forward fire-rooms.

The preceding photograph was taken just minutes before the next one below, for the oil slick to starboard still trails astern and is not bleeding directly out alongside the beam (see next). It is probably from the eruption of steam that the Asashimo has just received the hit that halts her and is slowing to a stop."

212. Operation Ten Ichi Go April 6-7 1945
Higher resolution version of the last photo.

213. Operation Ten Ichi Go April 6-7 1945
Photo courtesy of Anthony Tully who writes:

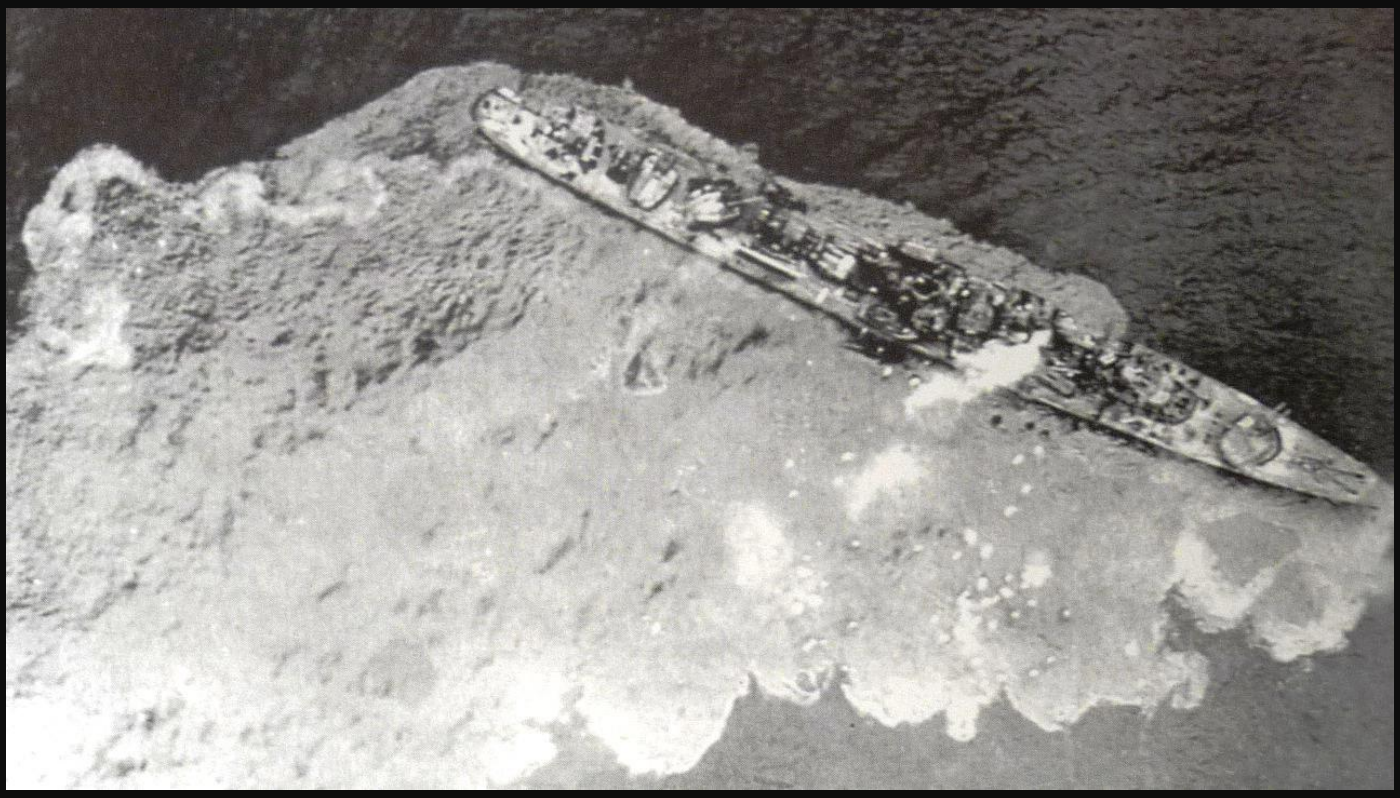
"The next photo is just after for another reason too---it was taken by a VF-82 plane of USS Bennington at 1245-50 in the same attack that claimed sinking Hamakaze. A destroyer that is clearly Asashimo was reported as near-missed or hit by the squadron leader's fighter bomber. Probably no further damage came at this moment, but it is clear that Skipper Sugihara was using the time just after the Bunker Hill's attack seeking to either lighten Asashimo or lessen the risk of

exploding torpedoes by training his tubes outboard to port and jettisoning torpedoes. (Probably the latter, since they got trained back in) If taken during the dive pull-out the diminishing splash to port may just be VF-82 Lt.Cdr. Hessel's dud bomb impact. Notice the steam diminishing."

214. Operation Ten-ichi-go, April 6-7, 1945

This appears to be the wider view of the previous photo of Asashimo. She lies dead in the water after several bombs hit amidships. What may be secondary explosions are visible in the center of the ship. Colorized photo courtesy of Irootoko Jr.

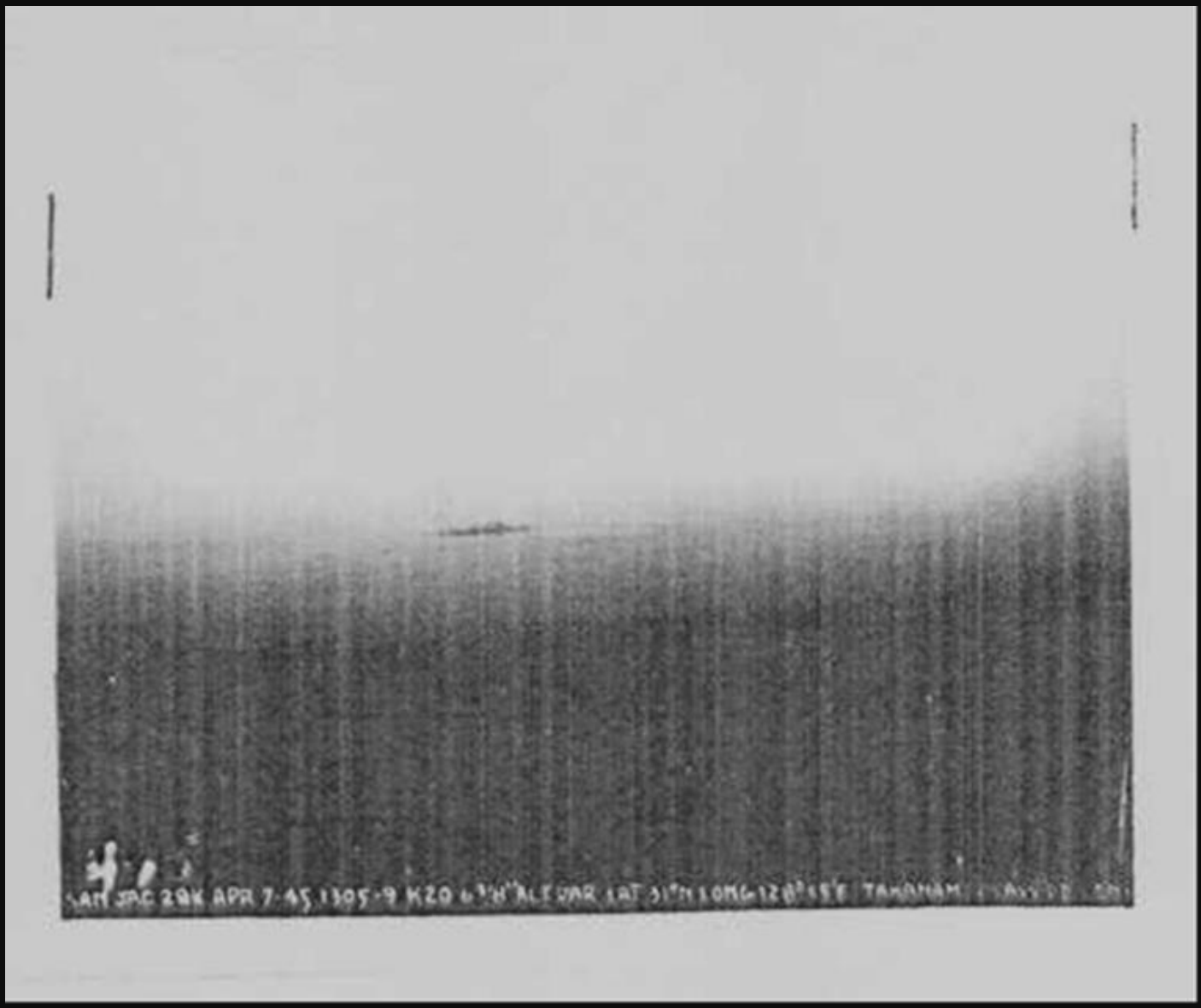
215. Operation Ten Ichi Go 6-7 April 1945
A second recently discovered (2023) color photo shows Asashimo dead in the water and burning from bomb hits amidships. Secondary detonations and/or explosions from strafing or wing fired rockets are also clearly visible. None of the crew would survive her sinking.



216. Operation Ten-ichi-go, April 6-7, 1945
Asashimo drifting with her ever-widening oil slick. The end would come soon.

217. Operation Ten-ichi-go, April 6-7, 1945
A wider version of the same (or near-simultaneous second) photo. Anthony Tully writes:

"This haunting photograph taken from San Jacinto Lt. (jg) David H. Willis the Photographic Officer of VF-45 when the fighters over-flew Asashimo just before the torpedo planes attacked. Taken from 2,000 feet it shows Asashimo frozen in her agony in a surreally clear plan view on the brink of eternity. Dead in the water and bleeding oil heavily from the starboard side. The photograph is important as being one of the best verticals of a Yugumo-class, and incidentally confirming the identity as Asashimo beyond any doubt. It also confirms the relative lack of damage to the destroyer other than being halted from Bunker Hill's aircraft's prior attack. Notice the torpedo tubes once more trained in. There is little obvious signs of bomb damage. It is for this reason the text above suggested `grazing near-misses' as also possible--- for there is no doubt the starboard side has been opened up and damage inflicted stopped the ship. Asashimo is still on an even keel, and seems to be also on even trim, and this is consistent with crippling but limited holing from bomb damage. Notably, if the photograph is a direct vertical, there appears to be a very slight port list, the opposite side that seems the worst damaged. But this may be an optical illusion."

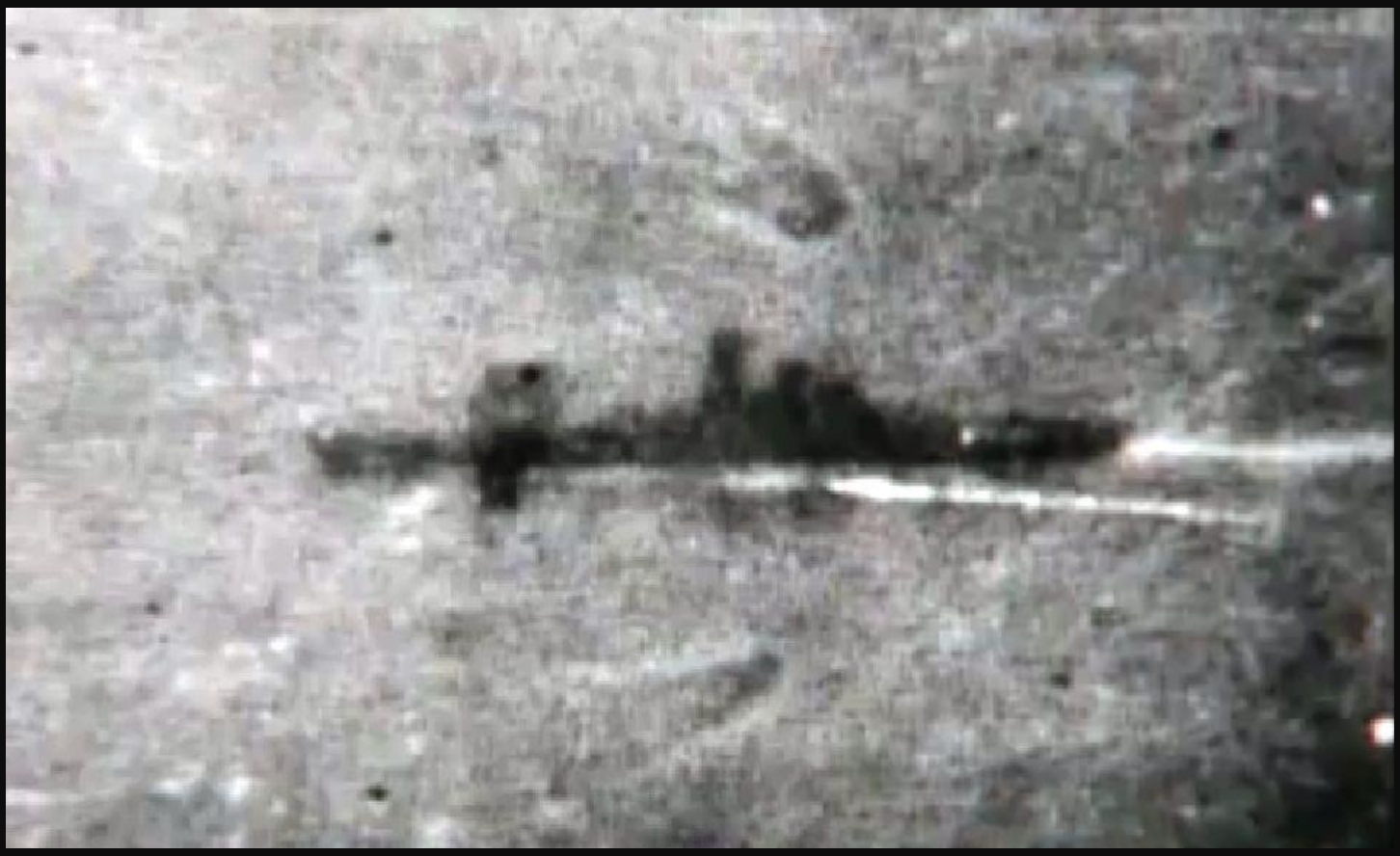


218. Operation Ten-ichi-go, April 6-7, 1945
First of two photos of Asashimo taken from one of the two torpedo planes that would momentarily sink her. Photo courtesy of Anthony Tully.

4-7
SAM JAC 28K APR 7-45 1305-9 K20 6⅜" ALTVAR LAT 31°N LONG 128°55'E TAKANAMI CLASS DD
This shows the second torpedo hitting, the
"coup de grace" which sank the destroyer within
five minutes after the attack was made.

219. Operation Ten-ichi-go, April 6-7, 1945
Photo courtesy of Anthony Tully who writes:

"This pair of photographs was taken with a K-20 camera from the same radioman's compartment of one of the attacking torpedo planes. It shows Asashimo in profile from starboard as the plane makes its run, and then Asashimo 'as it exploded as a result of the two torpedo hits.' The plane had zoomed over the target and is looking back aft at the port side."



220. Operation Ten-ichi-go, April 6-7 1945

1215 hours, April 7, 1945. The attack begins. Those black dots could be USN planes heading for Yamato, or defects on the negative. A possible AA gun flash appears visible on the right side of the frame on the aft deck but could also be a reflection of light off the deck, or detonation of ordnance. Possible torpedo wake may also be visible near the bow of the ship, or a reflection off the water. The black splotch at the front may be smoke, or more likely dirt on the negative. It would be helpful to examine the entire photo this is cropped from, but to date I have not seen it.

"A shrill voice: 'The enemy is using both torpedoes and bombs!'.. The tracks of the torpedoes are a beautiful white against the water, as if someone were drawing a needle through the water; pressing in, aimed at Yamato from a dozen different directions and intersecting silently.

Estimating by sight their distance and angle on the plotting board, we shift course to run parallel to the torpedoes and barely succeed in dodging them.

We deal first with the closest, most urgent one; when we get to a point far enough away from it that we can be sure we have dodged it, we turn to the next. Dealing with them calls for vigilance, calculation, and decision..

Before we know it, we have dodged several torpedoes; at last we take one hit on the port bow."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

221. Operation Ten-ichi-go, April 6-7, 1945
Yamato and her escorts execute a simultaneous turn to starboard early, at about 1230PM, just before the beginning of the USN attack. Yamato appears to have just fired one of her guns at the planes - note the smoke above the ship - and the destroyer at upper left has just fired her 5" guns.

From the US Navy official account:

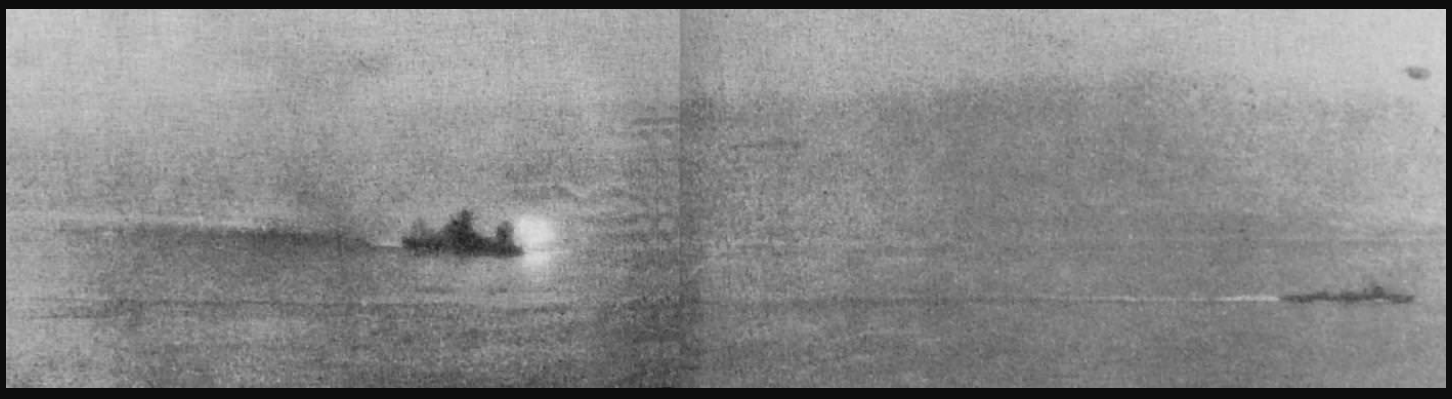
"The carrier planes began their attacks in the early afternoon, scoring immediate bomb and torpedo hits on Yamato and sinking Yahagi and a destroyer. Three other destroyers were sunk over the next hour, as the Japanese continued to steam southwards."

Make sure to zoom in – this is a high resolution photo.

222. Operation Ten-ichi-go, April 6-7, 1945

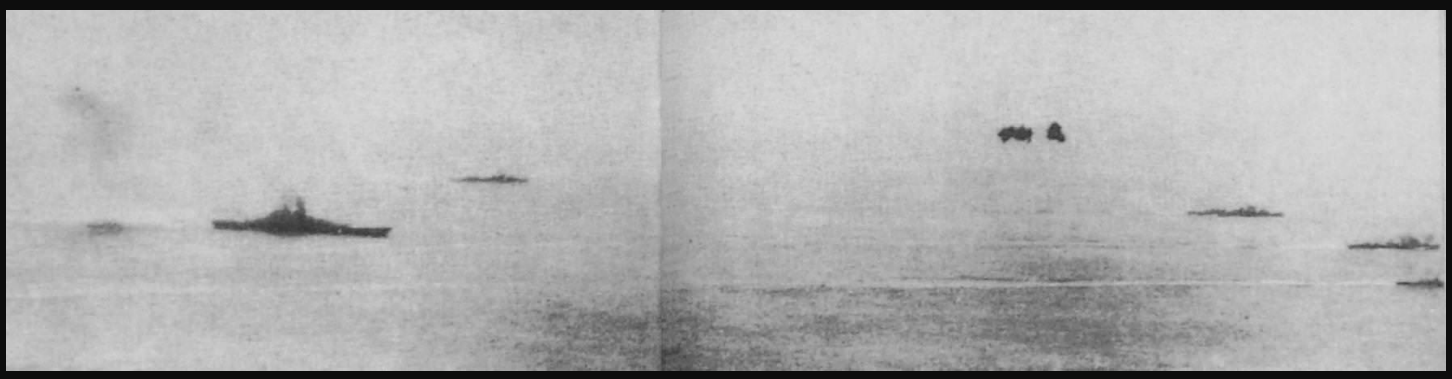
Per Japanese sources, these are destroyers Hatsushimo and Fuyutsuki maneuvering between bomb splashes.

Anthony Tully adds : *"I have seen the near one identified as YUKIKAZE."*



223. Operation Ten'ichigo, April 6-7 1945

Yamato fires her forward 18.1" guns at approaching US Navy planes. Low cloud cover made accurate aiming of the AA'San-shikidan' shells nearly impossible when the Navy planes were about 10 kilometers away. According to Spurr, later on during the desperate battle Yamato's guns were leveled and fired into the water in front of the attacking torpedo bombers in the hope that the resulting geysers would make aiming the torpedo drops more difficult.



224. Operation Ten'ichigo, April 6-7 1945
Early on during the beginning of the attack, the Yamato and escorts maintain formation. Note the flak bursts which are visible in many of the aerial photos.

225. Operation Ten-ichi-go, April 6-7, 1945
In this photo taken moments later during the first attack, the Yamato plows forward. A geyser of water from what was probably a near miss from a bomb can be seen behind the ship.

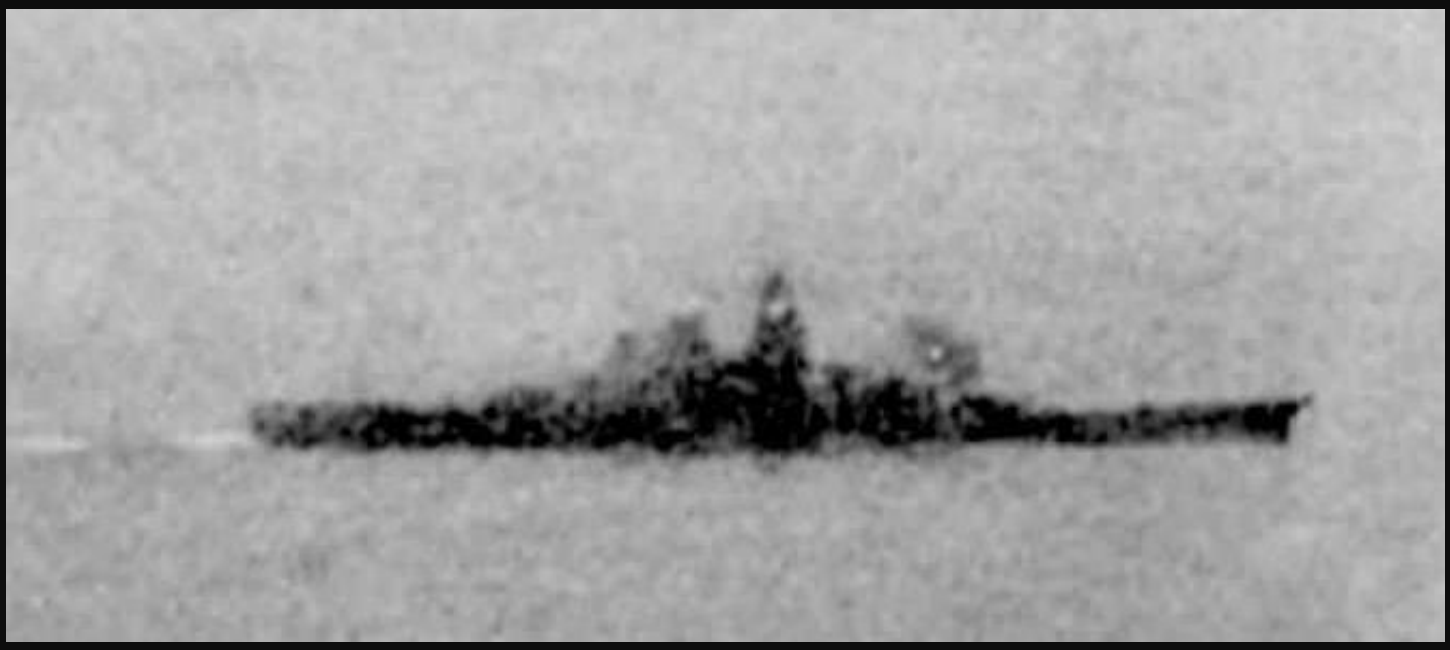
Note the light cruiser Yahagi on the left of the photo - she appears to still be under way, and has turned to avoid attack.

The Yahagi was initially in the van of the formation, and pulled away from Yamato as the attack began as Captain Hara hoped to draw some of the attacking planes away from the capital ship.

However, a lucky torpedo hit early on blew off part of her stern and killed everyone in the engine room, quickly rendering her motionless, where she would be hit by another 11 torpedoes and 7 bombs before sinking (see later photos).

Anthony Tully writes:

"Hornet photo taken about 1245 but before Yahagi was hit. The fleet has made the left turn east from its southerly course, and Yahagi is going west having chosen to make evasive starboard circles. Notice the plume arising of Yamato's starboard quarter above and beyond the spray in the wake. This may be Hamakaze's explosion cloud. More than one photo in this time frame show a persisting tall smoke plume rising from the sea well to Yamato's port side."



226. Operation Ten'ichigo, April 6-7 1945
Close up from the previous photo. Smaller explosions, possibly a geyser, and/or AA fire from the front 6" guns is visible.

227. Operation Ten-ichi-go, April 6-7, 1945
This photo appears to captures the moment that one of the first bombs strike Yamato - right underneath the funnel on her superstructure, as several other bombs and/or torpedoes score near misses or a hit forward (see following photo for closeup). Note flak bursts and geysers of water in the upper left of the photo, where either the Yahagi or one of the destroyer escorts is under attack and may have just been hit.

228. Operation Ten'Ichigo - April 6-7,1945

A closeup of a detail of the previous image appears to capture a moment eerily similar to that described by Yoshida during the first attack wave:

"More than one hundred enemy planes attacking!' Is it the navigation officer who calls this out? Inevitable that both torpedoes and bombs will focus on Yamato.

The captain orders: 'Commence firing.' Twenty-four antiaircraft guns and 120 machine guns open fire at the same moment... The battle begins.

Here and now we fire the first shots of this desperate, death-inviting battle... My baptism by fire...As my whole body tingles with excitement, I observe my own exhilaration; as I grit my teeth, I break into a grin.

A sailor near me is felled by shrapnel. In the midst of the overwhelming noise, I distinguish the sound of his skull striking the bulkhead; amid the smell of gunpowder all around, I smell blood.

Yoshida Mitsuru, "Requiem for Battleship Yamato"

As the Yamato Task Force had no CAP (air cover) of its own, the American bombers were free to line up methodically at 20,000 feet directly above the ship - then they dove inside a narrow vertical "cone" of space where Yamato's anti aircraft guns could not fire, dropping bombs and simultaneously firing all of their wing rockets while emptying their .50 cal machine guns all at the same time on the way down, according to Lt Edward Siebert, one of the first two pilots to score two direct bomb hits on the aft portion on the ship.

229. Operation Ten'Ichigo - April 6-7,1945

"There is virtually no list, but bombs have made two direct hits near the aft tower." - Yoshida Mitsuru, "Requiem for Battleship Yamato"

In this, the first of a series of 4 remarkable consecutive photographs, the first of those bombs impacts near the funnel on the port side of Yamato, destroying several 5" gun batteries.

This high resolution version of one of the most famous Yamato battle photos shows that the crane tower at rear - though not the crane arm itself, which operated independently - was removed for the final mission.

This makes sense because the crane tower limited the firing range of the rear 18.1" guns. Since the crane arm operated independent of the tower, Yamato still carried several float planes for submarine recon on until she left the inland sea, when they were sent home.

Looking at this photo and the following 3 photos, we can conclusively say that the crane tower was indeed removed prior to Operation Ten-ichi-go.

230. Operation Ten-ichi-go, April 6-7, 1945

"A messenger from the chief of fire control division, in a high pitched voice: 'The aft radar compartment appears to have taken a hit. Investigate the damage and report immediately.' The aft radar compartment is one of my posts; had I not happened to be on deck watch, I might have been on duty there....I run to the ladder at the aft side of the bridge and start down. To the right of the rail, as if eating into the iron bulkhead, a chunk of flesh. I brush it off with my elbow, and it goes sliding away...

An officer who stands exposed from the chest up in a side machine gun turret happens to look around. Our eyes meet as I run.

Ensign Takada, my classmate.

With his iron helmet down over his eyes, his swarthy face smiling, he calls in his Osaka dialect, 'Take care now,' and waves his pointer.

Answering promptly, 'Wilco', I run past without a glance. Who would have thought that this was to be my last sight of you, you son of a good Osaka family, you!"

Yoshida Mitsuru, "Requiem for Battleship Yamato"

This second photo shows the smoke from the first bomb hits. Yamato is struck by 4 armor piercing bombs near the funnel and aft of the rear fire control director within the first minutes of the initial attack.

231. Operation Ten-ichi-go, April 6-7, 1945
A colorized wider view of the last photo. Colorized photo courtesy of Irootoko Jr.

232. Operation Ten-ichi-go, April 6-7, 1945
A wider photo taken moments apart from the last one. Anthony Tully writes:

"Photograph taken by Hornet Helldiver of VB-17 as it pulls out steeply from bombing Yamato. In close-ups, what appears to be smoke from fire is visible beneath the towermast and among the port AA batteries. The fire near No.3 turret is just starting to grow."

233. Operation Ten-ichi-go, April 6-7, 1945

This remarkable photo, taken a fraction of a second after the last one, shows the aftermath – perhaps the moment - the third and/or fourth bombs strike aft of the funnel and main mast. These would prove the deadliest of many bomb hits to come. The bombs slice in at an angle in the narrow opening between the rear fire control director and the rear 6" secondary turret, wiping out two machine gun mounts and their crews on their way down, slicing into the radar control room and exploding there.

The radar room and all inside it are wiped out; the force of the blast also knocks out the rear fire control director and sets off a secondary explosion in the aft 6" secondary turret, which destroys it and starts a fire that is never extinguished.

Mere minutes after this photo is taken, Yoshida arrives at the radar room:

"It is as if someone had taken an ax and split a bamboo tube. The bomb, a direct hit, must have sliced its way in at an angle and then exploded.

Tuned and retuned in preparation for today's defensive battle, the instruments have been scattered in all directions...I notice a chunk of flesh smashed into a panel of the broken bulkhead, a red barrel of flesh about as big around as two arms can reach.

It must be a torso from which all extremities - arms, legs, head - have been ripped off.

Noticing four hunks nearby, I pick them up and set them in front of me.

To the charred flesh are stuck here and there pieces of khaki-colored material, apparently scraps of military uniform. The smell of fat is heavy in the air.

It goes without saying that I cannot tell where head and arms and legs might have been attached.

That it should be impossible to tell one corpse from another!

As I lift them, they are still hot from burning; when I run my hand over them, they feel like the bark of a rough tree.

My fellow officers and men who were alive and at work here until a few minutes ago, and these hunks of flesh: one and the same, separated only by time!

How can I believe that?

The lives lodged in these four bodies - where have they gone?

The other eight men have been completely blown away; not even the stench of their deaths is left to float in the air.

What emptiness!

How did they die, those beings who only a moment ago were so real?

I cannot stop doubting, stop marveling.

It is not grief and resentment. It is not fear. It is total disbelief. As I touch these hunks of flesh, for a moment I am completely lost in thought."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

234. Operation Ten-ichi-go, April 6-7, 1945
A later photo shows that the aft 6" turret has exploded, and is burning white hot behind the funnel; another near miss to port; the sides of the ship in this, and in the previous 3 photos writhe in the smoke from the constantly firing anti-aircraft machine guns. This photo shows some of the carnage on decks caused by bombs and strafing, in addition to the smoke from the Yamato's own guns. Make sure to zoom in – this is a high resolution photo.

Anthony Tully further describes this photo:

"This famous photo turned out to be later than one would expect -- its from an INTREPID dive-bomber as they bombed her around 1400 ... you see bomb explosion smoke from hit at base of tower port side--just where INTREPID's bombs did land."

Yoshida writes in Requiem:

"A wave of sound comes smashing toward me from astern. My legs tremble ominously..For shame. I have duties on the bridge. This isn't the place for me to die...

Head down, with one hand touching the handrail, I make a mad dash. My eyes see nothing at all.

The ship is steaming at full speed, and wind stirred up by her forward motion surges along the whole passageway.

Just as I start to scramble up the ladder at the base of the main tower, my eyes go taut - perhaps because my whole body is so keyed up: no sign of that machine-gun mount, Ensign Takada's post.

Heartsick, I turn my head and stare with wide-open eyes: a great gouged-out spot, and clouds of white smoke boiling up out of it - that is all.

People, guns, mount - in one instant wiped out without a trace?

Ensign Takada. Forgive me.

A moment ago, you shouted encouragement to me through the rain of bullets, but I was caught up in the danger to my men and did not respond. I ran on past without even a word of reply.

That you have met such a cruel death - is it because I was remiss in encouraging you?

You who were a good man and true, so adept at keeping everyone else's glass full. You of the white teeth, who often broke into a loud laugh.

With eyes squeezed shut, I race up the ladder...

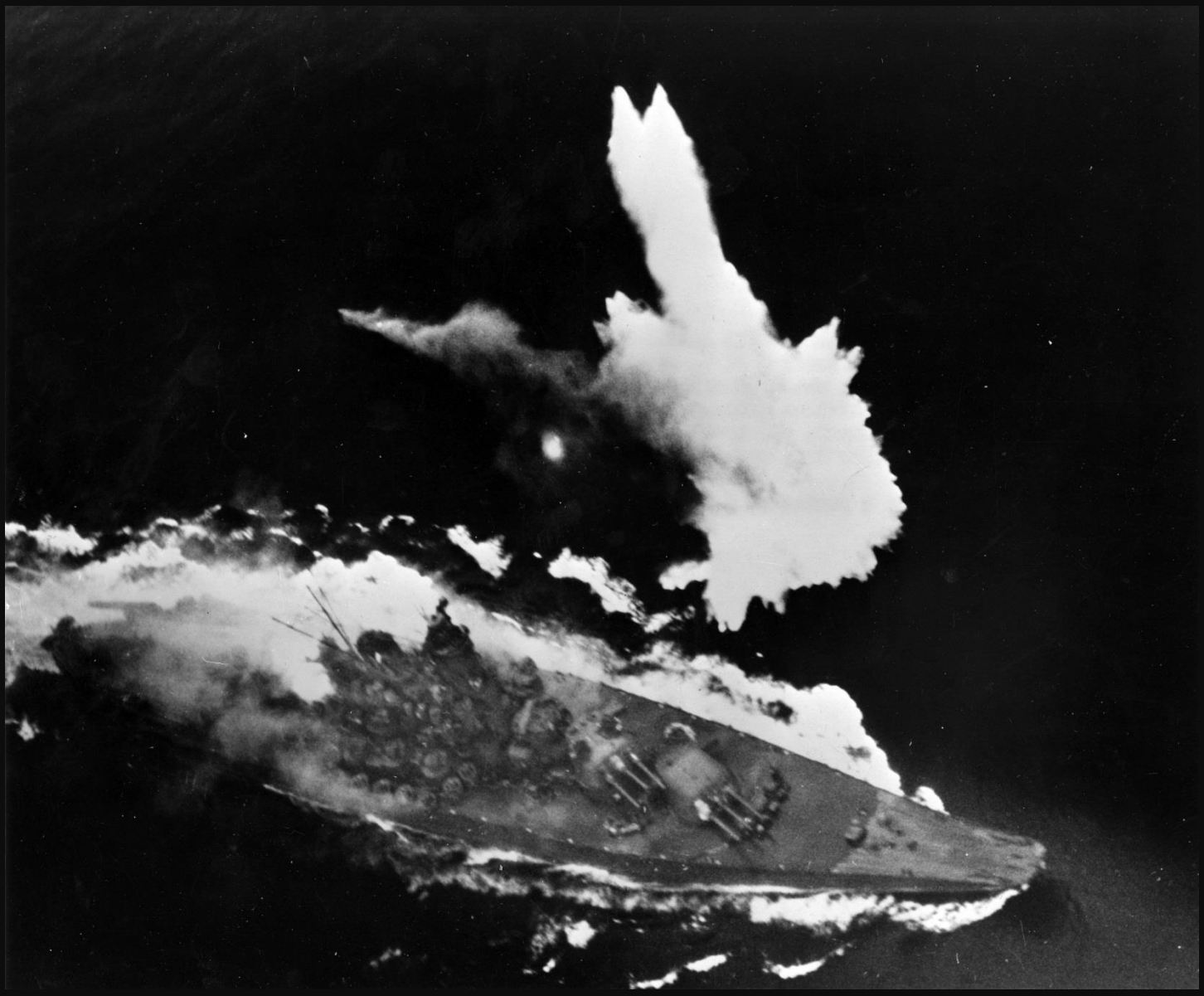
I report immediately to the division officer. The air search radar, a crucial weapon of our defense against planes, has thus been destroyed at the start of the battle....

Lieutenant Usubuchi (in charge of the aft secondary guns) is killed by a direct hit.

The young warrior who was both wise and courageous leaves behind not one bit of flesh, not one drop of blood.

He hoped by dying to awaken new life. His body, offered up in the cause of a genuine national rebirth, has disappeared into thin air."

Yoshida Mitsuru, "Requiem for Battleship Yamato"



235. Operation Ten-ichi-go, April 6-7, 1945
A wider high resolution version of the previous photo. Make sure to zoom in to view.

236. Operation Ten-ichi-go, April 6-7, 1945
A colorized wider view of the last photo. Colorized photo courtesy of Irootoko Jr.

237. Operation Ten-Ichi-Go April 6-7 1945
Navy Helldivers take their turns diving on the Yamato. Note that she is still burning visibly from that early strike between the rear fire control director and the secondary turret that took out the radar room and the aft 6" secondary battery.

Anthony Tully writes: *"This is LATE in the engagement--taken by INTREPID's dive-bombers."*

238. Operation Ten-ichi-go, April 6-7, 1945
Close up of the previous photo clearly shows the fire from the bomb hits aft described earlier. Note the splashes from bomb near misses to port just aft of the ship.

239. Operation Ten-ichi-go, April 6-7, 1945
Yamato after the first attack is seen near the top of this photo. The rear fire is visible, as Yamato and several of her destroyers are zig-zagging to avoid bombs and torpedoes. In the foreground, one of Yamato's destroyer escorts sits motionless, leaking oil, having been taken out of the battle during the first attack. In the end, Yamato, cruiser Yahagi, and 5 of their 8 destroyer escorts would be sent to the bottom.

The Navy Archive caption under this photo reads*: "Japanese Battleship Yamato burning but still under way following the first attack."*

Anthony Tully writes about this photo:
"Here is one of the survey photographs either by TG 58.3 or or 58.4 (depending on source) showing the YAMATO group before TG 58.4 attack. Roughly at the end of Nomura's "Second Attack." (1318-1334) A stalled destroyer often identified

as HAMAKAZE but almost certainly the KASUMI, lies in the foreground. An Akizuki-class lies beyond, and because of the notable smoke may be SUZUTSUKI but FUYUZUKI remains more likely. YAMATO is moving away in the near distance. The two-stack destroyer to the right of frame from vague indications of profile is probably HATSUSHIMO. The time of photo is probably about 1330-1350 and after KASUMI has stopped."

240. Operation Ten-ichi-go, April 6-7, 1945

A wider view of the preceding photo (or possibly a second photo taken almost simultaneously). Japanese sources identify the ships as Kasumi (in foreground leaking oil), then Fuyutsuki, Yamato and Hatsushimo in the rear.

241. Operation Ten-ichi-go, April 6-7, 1945
During the first attack, the Yamato and surviving destroyer escorts are zig-zagging. Yamato is smoking heavily from the several aft bomb hits described earlier and zig-zagging to avoid torpedoes..

Note that what I presume to be Yahagi has now fallen further behind Yamato (see the light silhouette at the extreme upper left corner of the photo) and appears to be dead in the water and smoking.

On the extreme right of the photo, a towering plume of water from a bomb near miss on one of the destroyers is also visible.

"Bombs rain down squarely on the turrets, each equipped with the three 25 mm machine guns ...One after another the turrets fly up into the air.

The highest rises twenty meters, turns over several times, and then falls back down with a crash.

A scene of carnage with no place for the living.

Casualties among the machine gunners are staggering.

Moreover, because bombs have severed the wires, power outages follow in quick succession...electric-powered weapons turn one after the other into useless chunks of steel.

Firing the guns reverts necessarily to a matter of sighting down the barrel...

Our aim becomes even more inaccurate."

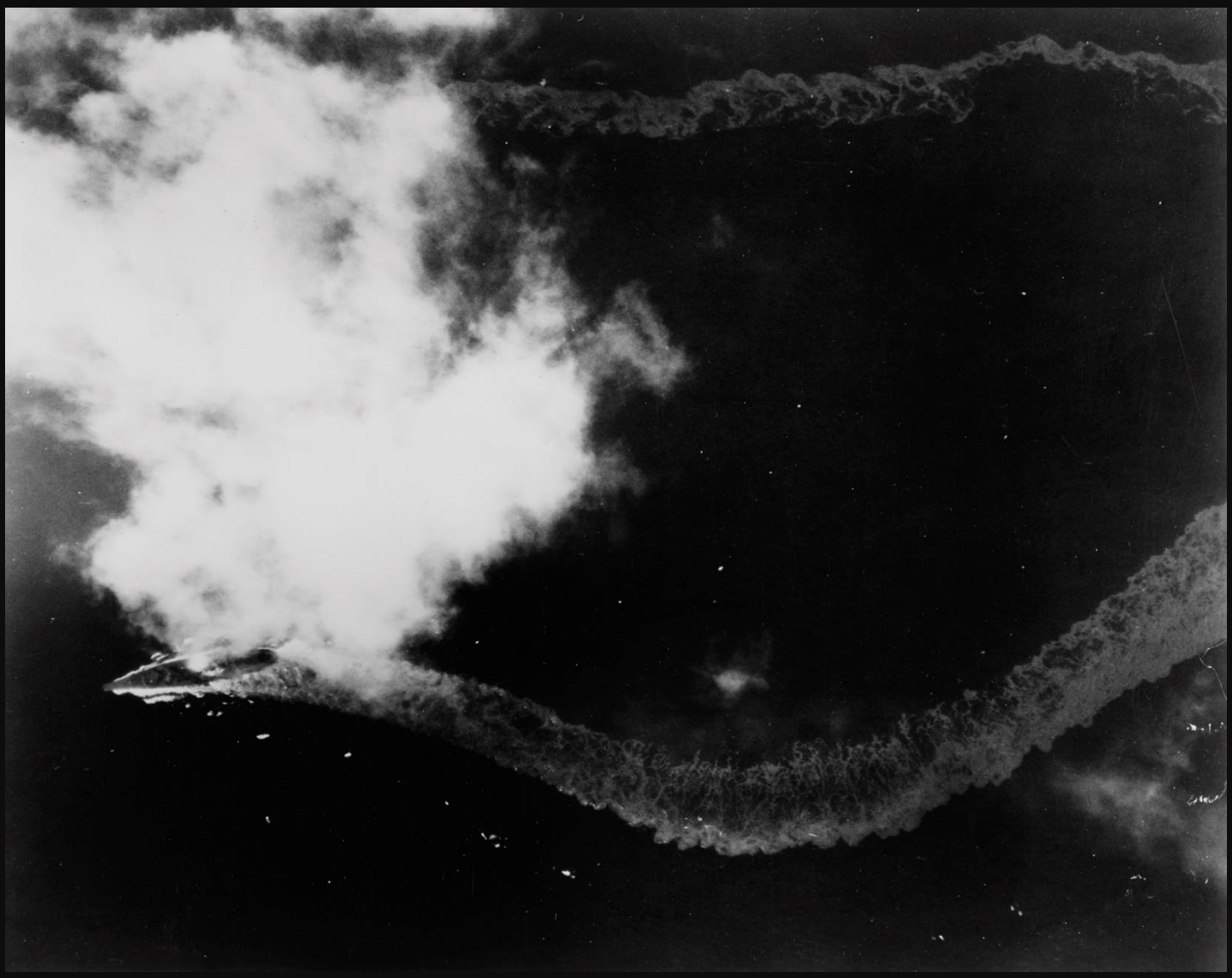
Yoshida Mitsuru, "Requiem for Battleship Yamato"

Colorized photo courtesy of Irootoko Jr.

242. Operation Ten-ichi-go, April 6-7, 1945
Close-up of the previous photo shows Yamato smoking heavily from the bomb hits of the initial attack wave that struck the aft superstructure and blew up secondary turret #2 as seen earlier.

Note the front 18.1" guns still pointing to port from where the attacks came.

Colorized photo courtesy of Irootoko Jr.



243. Operation Ten-ichi-go, April 6-7, 1945
Yamato zig zags under attack.

Anthony Tully writes: *"This is actually before the attack of TG 58.4 -- taken by YORKTOWN photo plane it shows how good condition YAMATO really still was in right up to 2pm before INTREPID and YORKTOWN torpedo attacks."*

244. Operation Ten-ichi-go, April 6-7, 1945

"Twenty torpedo tracks head toward Yamato. We take three hits on the port side. In the neighborhood of the aft tower. The overwhelming number of torpedoes has made it impossible, even with this ship's agility, to dodge them all. A veritable circle of fire closes in on us: from above, from all points of the compass, glistening."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

A description of the battle during the second attack wave, by which time the Yamato has already sustained heavy damage from multiple bomb hits described earlier.

Note: The torpedo strike in this photo - the plume of water rising about 50 stories above sea level - appears to depict the impact of one of the three hits described by Yoshida. If you look closely, a faint torpedo wake appears to be visible, leading to the point of the geyser of water. The smoke from the aft fire caused by the explosion of 6" Turret #2 is also visible.

Learning from the 9 hours it took to sink the Musashi 6 months earlier, the US Navy pilots are instructed to aim all of their torpedoes at one side of the ship (it turns out to be the port side), additionally aiming for the more lightly armored bow and stern sections. By creating massive flooding on just one side of the ship the idea was to make her capsize more quickly. It worked. It did not help matters any that a bomb knocked out the pumping control room during the second attack wave, making it impossible to flood the special exterior starboard compartments ('bubbles') that were meant specifically to help the ship keep her trim in just such an event.

In desperation, the aft starboard engine and boiler rooms are ordered flooded instead. This move rights the ship initially and buys her perhaps an additional 30 minutes of life, but cuts her speed in half to about 12-13 knots, at the cost of the lives of hundreds of sailors in those compartments, most of whom probably did not have time to get out once the alarm was sounded.

245. Operation Ten-ichi-go, April 6-7, 1945
As more bombs miss the ship, Yamato plows forward at apparently reduced speed, judging from the width of the wake. The aft deck is obscured by the fire caused by the explosion of the aft 6" secondary turret.

White dots above and around the ship appear to be AAA explosions; smoke alongside the starboard side indicates that the .25 cal anti-aircraft machine guns are still firing; they will be largely silenced by upcoming attacks.

Anthony Tully writes: *“This is (a) photograph by a HORNET plane during the HORNET/BENNINGTON dive-bombings.”*

246. Operation Ten-ichi-go, April 6-7, 1945
Yamato is struck by a torpedo, or two. Anthony Tully describes this photograph further:

“MAY actually belong to the final phase--I think that is INTREPID's Grant's torpedo hit port aft in the last attack before YORKTOWN. Say about 1405.”

Yoshida describes the scene:

"Very near (bomb) misses land to port and starboard and in the water ahead. Time and again we plunge ahead into a forest of geysers.

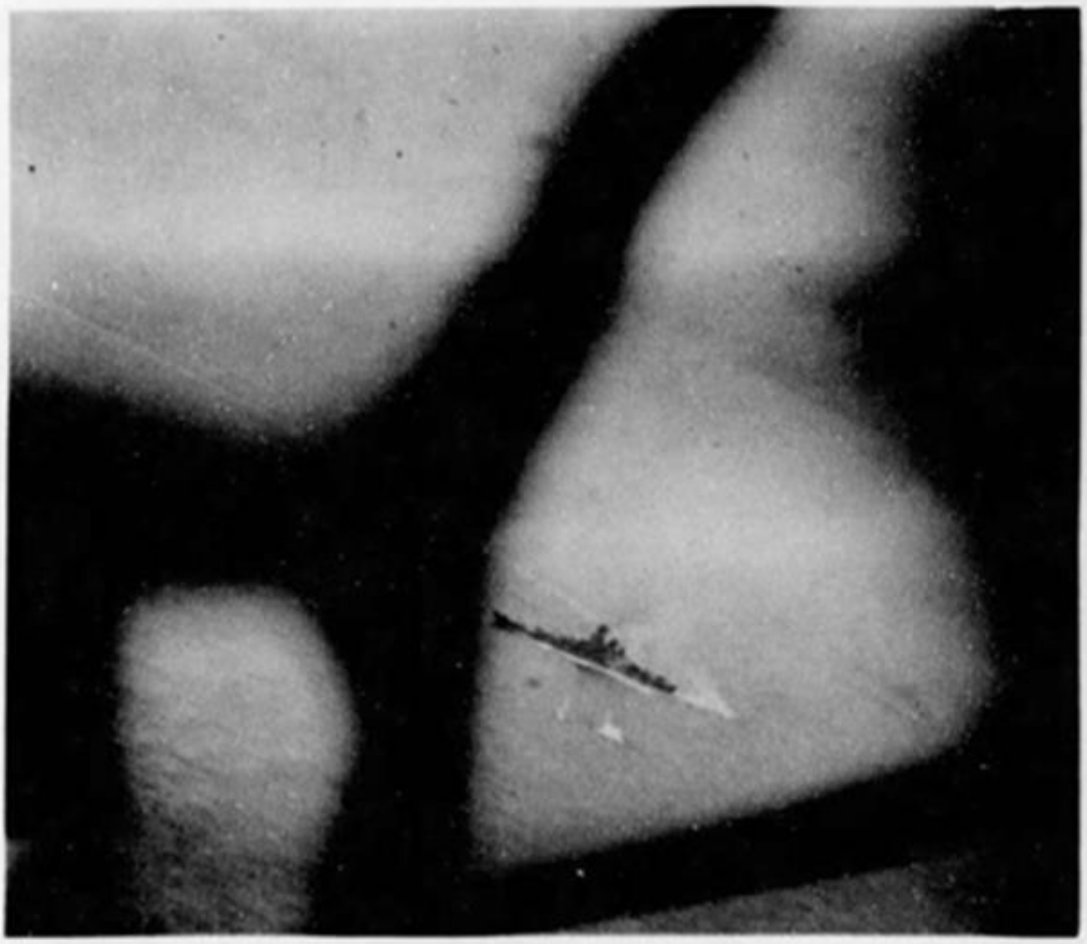
Water, ten times more than a torrential shower, cascades in, almost shattering the ports of the bridge.

Chaos everywhere from the wild force of the water."

Once the hull had been breached by torpedo hits, even the near misses by the bombs did significant damage; the shock waves helped tear the torpedo holes open wider; additionally, the ship's primary armor "box" protecting the vulnerable midships turns out to be too rigidly constructed, and unable to bend under the shockwaves of the near misses (water is a much better conveyer of shock waves than air), causing rivets to pop and numerous additional small openings to pop open alongside the ship, making flood control that much more difficult due to the sheer scope and breadth of the leakage.

247. Operation Ten-ichi-go, April 6-7, 1945
Dive-bomber's view of Yamato as she turns to avoid another attack (see the torpedo drop splash to her portside.)

248. Operation Ten Ichi Go April 6-7 1945
Closeup of previous photo as photographed from a USN plane. Detail of much larger photo that follows.



WEST OF KYUSHU, 7 April 1945

YAMATO under attack by ESSEX Helldivers which scored four direct hits with 1000 pound armor-piercing bombs. ESSEX Avengers also made four torpedo hits. Here the splash of a torpedo is seen (left) and the splash of a bomb (right). YAMATO sank after subsequent attacks by other Air Groups.

249. Operation Ten Ichi Go April 6-7 1945

This entire photo from which the last two images were cropped is provided by Anthony Tully, who writes:

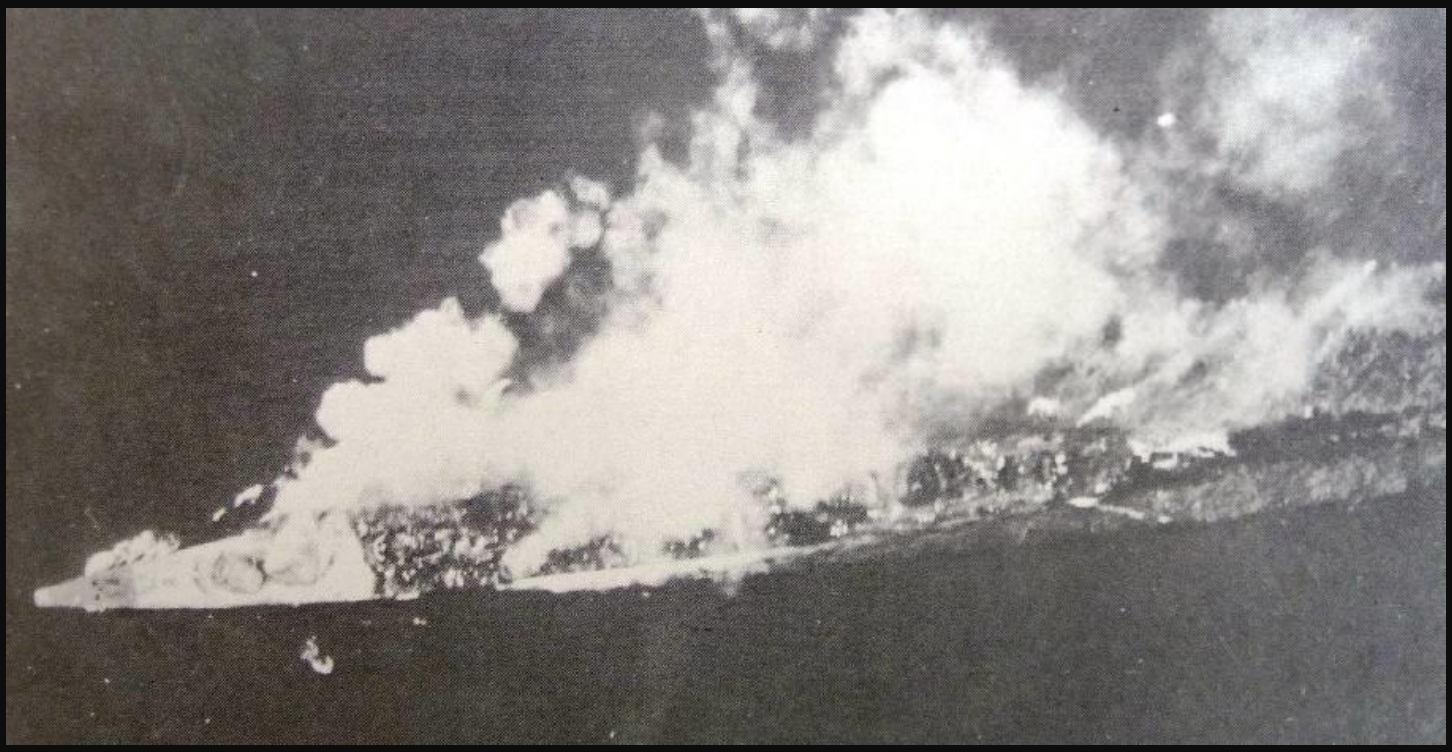
"Photograph from Essex AG-83 bomber as it pulls out. It shows Yamato making her wide starboard turn prior to torpedo hits to port as bombs land near off the stern and torpedo splashes into the water to port. This is the best photo seen of the Essex coordinated attack by dive-bombers and torpedo planes together. The Yamato when CV-9 attacked was evidently in good fighting shape still."

250. Operation Ten Ichi Go April 6-7 1945

A better quality crop of the original photo provides some startling detail: A USN plane is clearly visible in the center of the photo above the ship, while in the upper left hand corner, almost out of frame, two SBDs execute bombing dives.

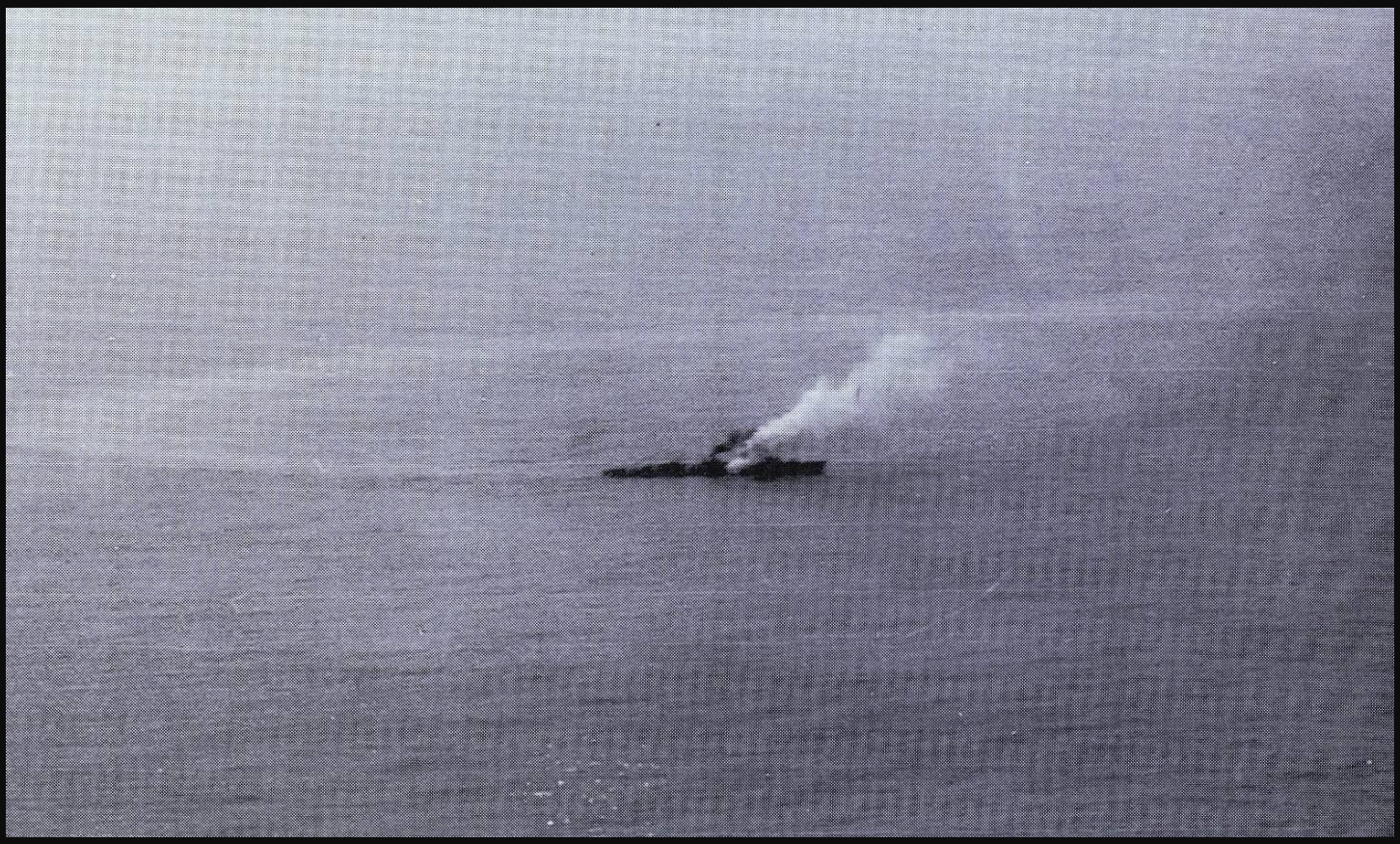
251. Operation Ten-ichi-go, April 6-7, 1945
Anthony Tully writes:

"Terutsuki-class destroyer under attack. This appears to be Suzutsuki just before she was struck by a bomb in the forecastle. Smoke from either AA fire or minor damage smudges the amidships. Historian Jim Sawruk points out that this ship has a white band around the funnel, known to be present on Suzutsuki at TEN-GO but absent from Fuyuzuki. This might even have been taken by the plane that struck her as it pulled out of its dive."



252. Operation Ten-ichi-go, April 6-7, 1945
Anthony Tully writes:

"Spectacular photo captures Suzutsuki several minutes after her catastrophic bomb hit with the speeding destroyer heavily afire and slowing down rapidly. The photo is not marred and the eyes are not deceiving--- Suzutsuki's entire forecastle deck between the bridge and No.2 turret has been blown completely away, exposing the interior compartments of the forward area. Despite this damage, Suzutsuki would make it back to Sasebo. This photo was actually taken by a YORKTOWN plane in the 1350 range so they apparently attacked her again, but as the report and photo both show, the major hit had already happened."

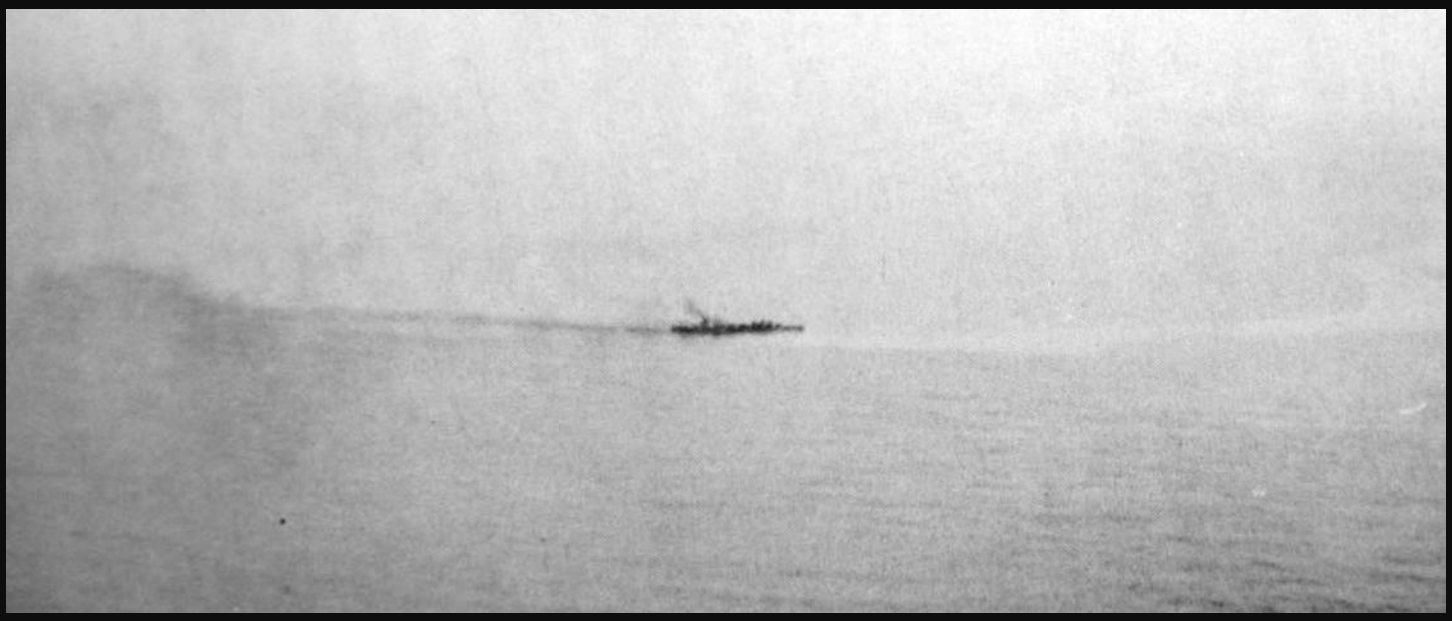


253. Operation Ten-ichi-go, April 6-7, 1945

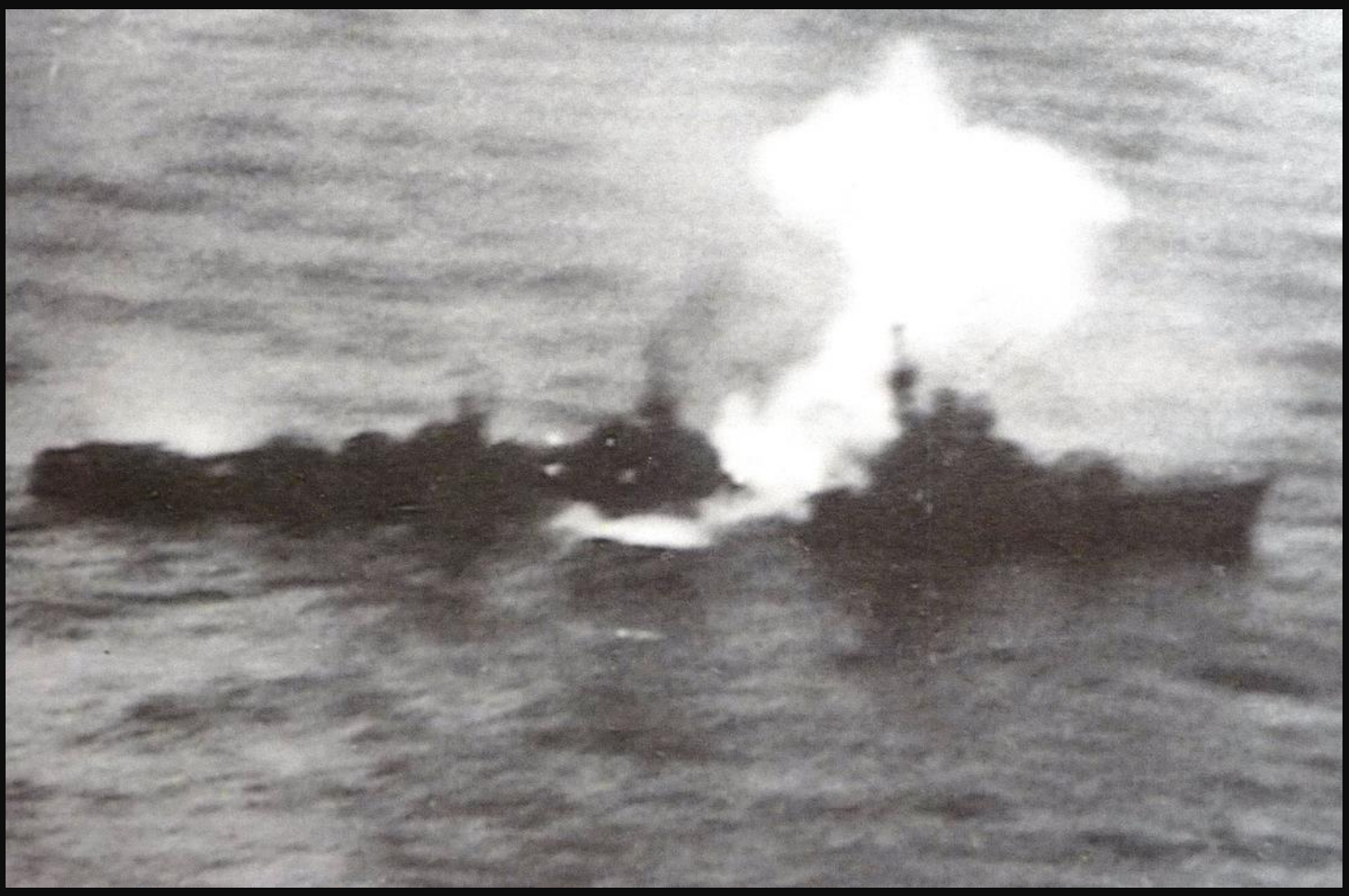
Destroyer Suzutsuki smoking from bomb hits. She would be one of the three destroyers to make it back to Japan, going backwards all the way due to her bow having been blown off by a torpedo during the engagement. She made very slow going and made it back much later than the other two surviving destroyers, arriving back in port almost at the point of sinking.

254. Operation Ten-ichi-go, April 6-7, 1945
Anthony Tully writes:

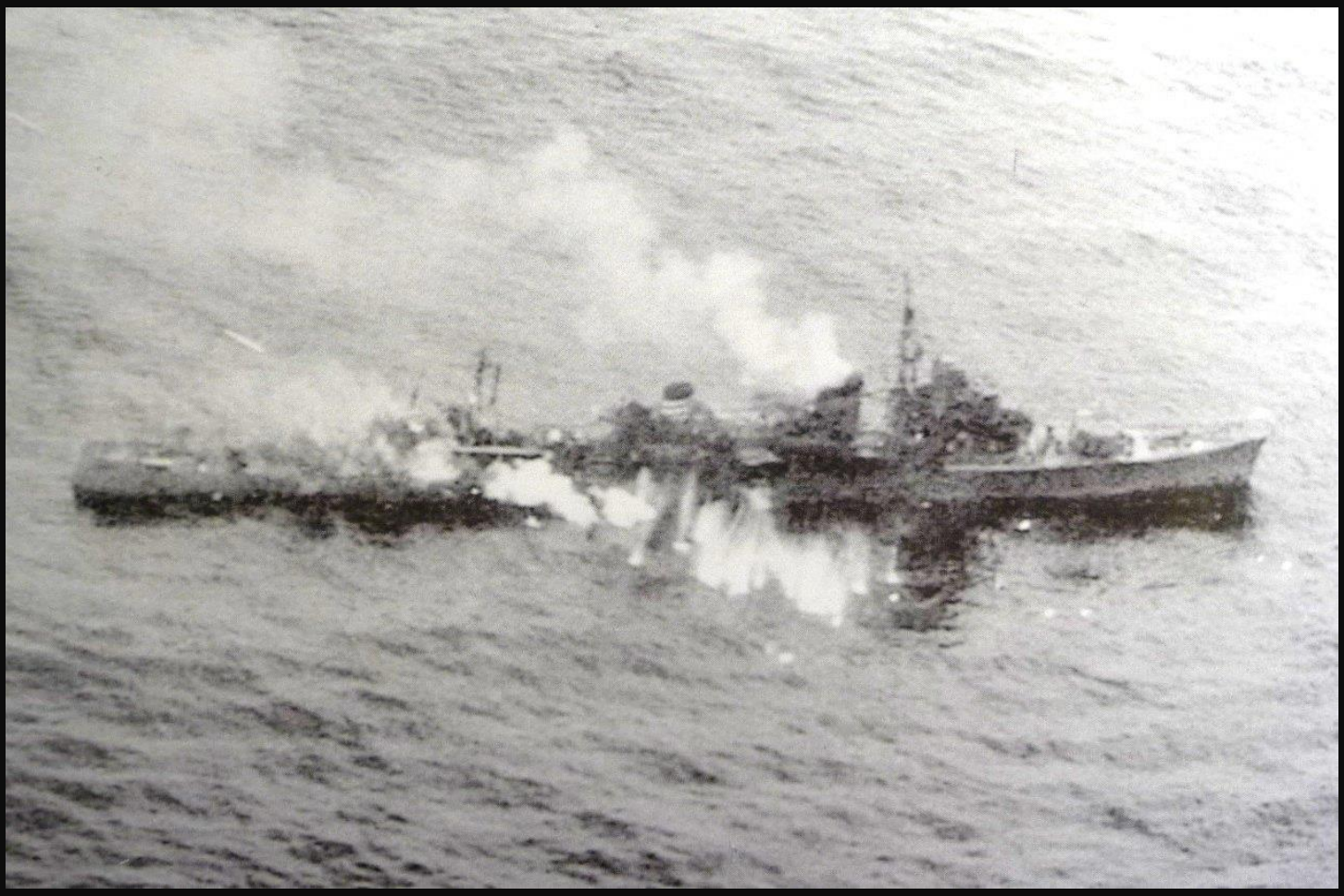
"Unidentified destroyer under attack during the first wave from TG 58.1. Then another view seen stalled and smoking. The apparent small size in both pictures suggests this may be Kasumi, which was crippled and left drifting so early in the attack she was generally neglected in both attention and pictures thereafter. This close-up is part of a wide frame picture where the destroyer closely chases Yamato in her wake and so is probably not Isokaze which dropped back early to assist Yahagi. Another argument in favor of Kasumi is the damage profile fits perfectly: Kasumi was hardest hit by the forward stacks and fire started there; Hamakaze, the other possibility, was hardest hit on the fantail. Enough of this vessel is visible to persuasively rule out a Kagero-class, and therefore this is almost certainly Kasumi."



255. Operation Ten-ichi-go, April 6-7, 1945
Anthony Tully identifies this photo as the stalled Kasumi leaking oil and smoking after bomb hits.



256. Operation Ten-ichi-go, April 6-7, 1945
Destroyer Kasumi burning from bomb hits that tear her open amidships. She is dead in the water. It looks like she may be about to break apart at the point of the impact.



257. Operation Ten-ichi-go, April 6-7, 1945
Dead in the water, smoking from bomb hits, this destroyer endures a fusillade of tracer and .50 cal machine gun fire.

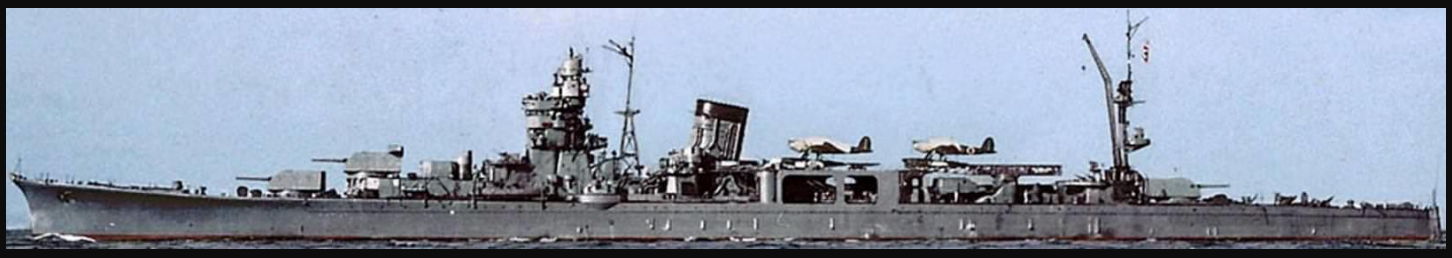
Anthony Tully makes the case that this is a photo of destroyer Isokaze (photo often ID'd as Hamakaze):

"This excellent view of a Kagero-class stalled and under fierce attack during the Last Sortie frustratingly defies easy identification because the exact aircraft taking it is not known. It is either Hamakaze or Isokaze. It is often presumed to be Hamakaze just before being struck by torpedo but after going dead in the water. However, that is a very narrow window – two minutes if that – and Japanese survivors from Hamakaze consistently describe visually apparent vast damage from the bomb aft of No.2 turret in convincing detail. Some even use the phrase of fantail severed. This means the damage would appear in any of the stopped pictures. Yet the fantail of this Kagero appears intact – the round still visible, which would suggest instead the Isokaze. Against this, Isokaze did not lose all forward way till 1630 though this could be when standing by Yahagi or hove-to inspecting damage. Learning which Air Group took this photo would go far toward settling the matter. However, a final and significant discovery is that the photo was apparently taken by a TG 58.3 plane and is found in that report. Hamakaze was sunk by TG 58.1. This makes it even less likely to be Hamakaze."

258. Operation Ten-ichi-go, April 6-7, 1945

Anthony Tully provided this photo and identifies this sinking destroyer as most likely Hamazake:

"This second picture is far more reliably identified as a section of Hamakaze capsizing after her explosion and jackknifing. It may well be the forward section capsizing to port just as the Japanese survivors describe. The only other candidate is Asashimo. The San Jacinto report mentions two pictures taken of Asashimo taken at the end, and this is not either of them. Ship is clearly in sinking condition and unless another Air Group photographed Asashimo's sinking the probability is that it is Hamakaze. For what it is worth, the tall narrow smoke plume matches others presumed to be the exploded destroyer."



259. Operation Ten-ichi-go, April 6-7, 1945

Light Cruiser Yahagi. Yahagi was one of the newest and most modern anti-aircraft equipped cruisers in the IJN in 1945. She also carried 2 float planes - one of which could not return to Japan due to a broken engine, giving her pilot the opportunity to fulfill his wish to fight (and die) with his crewmates. Also see later photos of this plane floating amongst the wreckage of Yahagi.

How ironic then, that this ship, which was to serve as the cornerstone of Yamato's anti-aircraft defense ring, was immobilized by bomb and torpedo hits within the first half hour or so of the first attack.

Here is an excerpt from legendary destroyer Capt. Tameichi Hara's book "Japanese Destroyer Captain" containing his speech to the men of light cruiser Yahagi (his last command) as they embarked on their final mission with Battleship Yamato on April 6 1945. (quoted from p. 284):

"As you know, hundreds of our comrades have flown bomb-laden planes on one-way missions against the enemy. Thousands more of these flyers are standing by at every airfield. Hundreds of our comrades are ready in submarines to man one-way torpedoes. Thousands of others will drive explosive torpedo boats or crawl the bottom of the sea to fasten explosive charges against enemy ships.

Our job in this mission is part of the same pattern. Our mission appears suicidal and it is. But I wish to emphasize that suicide is not the objective. The objective is victory.

You are not sheep whipped to a sacrificial altar. We are lions released in the arena, to devour the enemy gladiators. You are not to be slain merely as sacrifices for the nation.

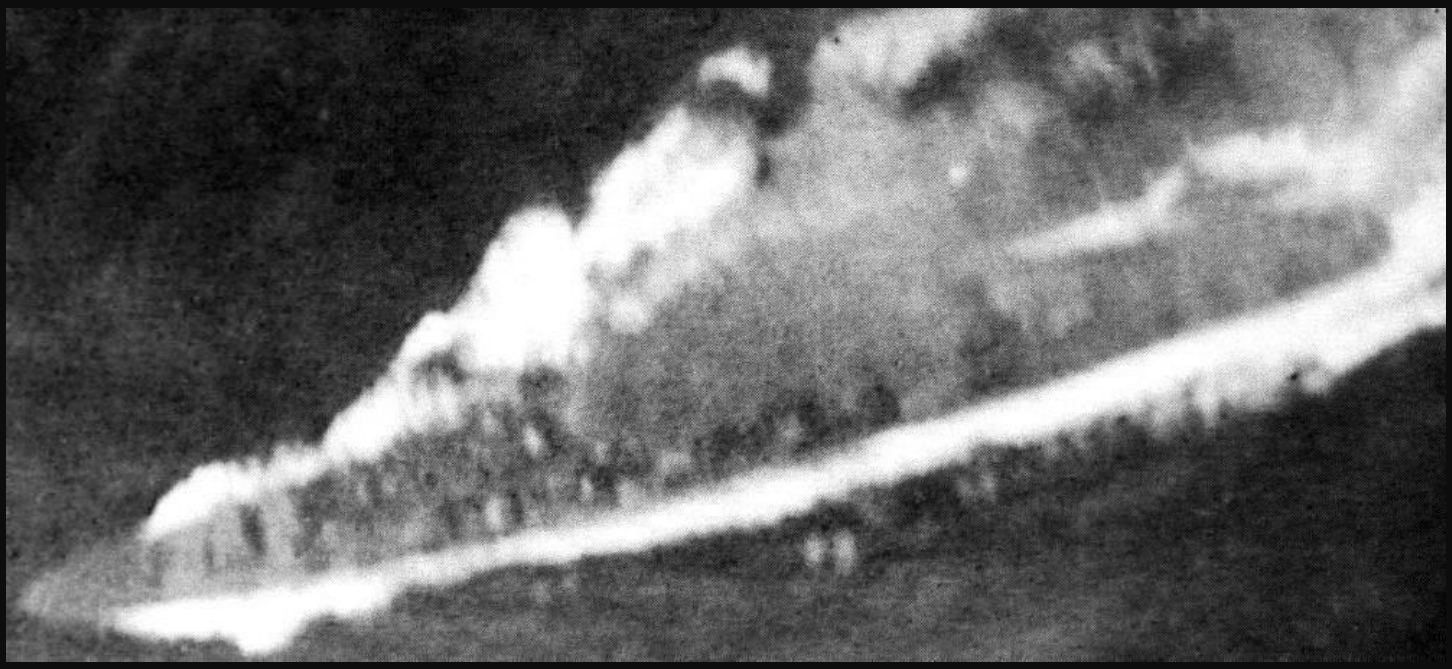
Do not hesitate to come back alive. We must force our way against any enemy effort to intercept our mission. But you must not give up your lives cheaply. Once this ship is crippled or sunk, do not hesitate to save yourselves for the next fight. There will be other battles. You are not to commit suicide. You are to beat the enemy!"

Colorized photo courtesy of the Irootoko Jr.

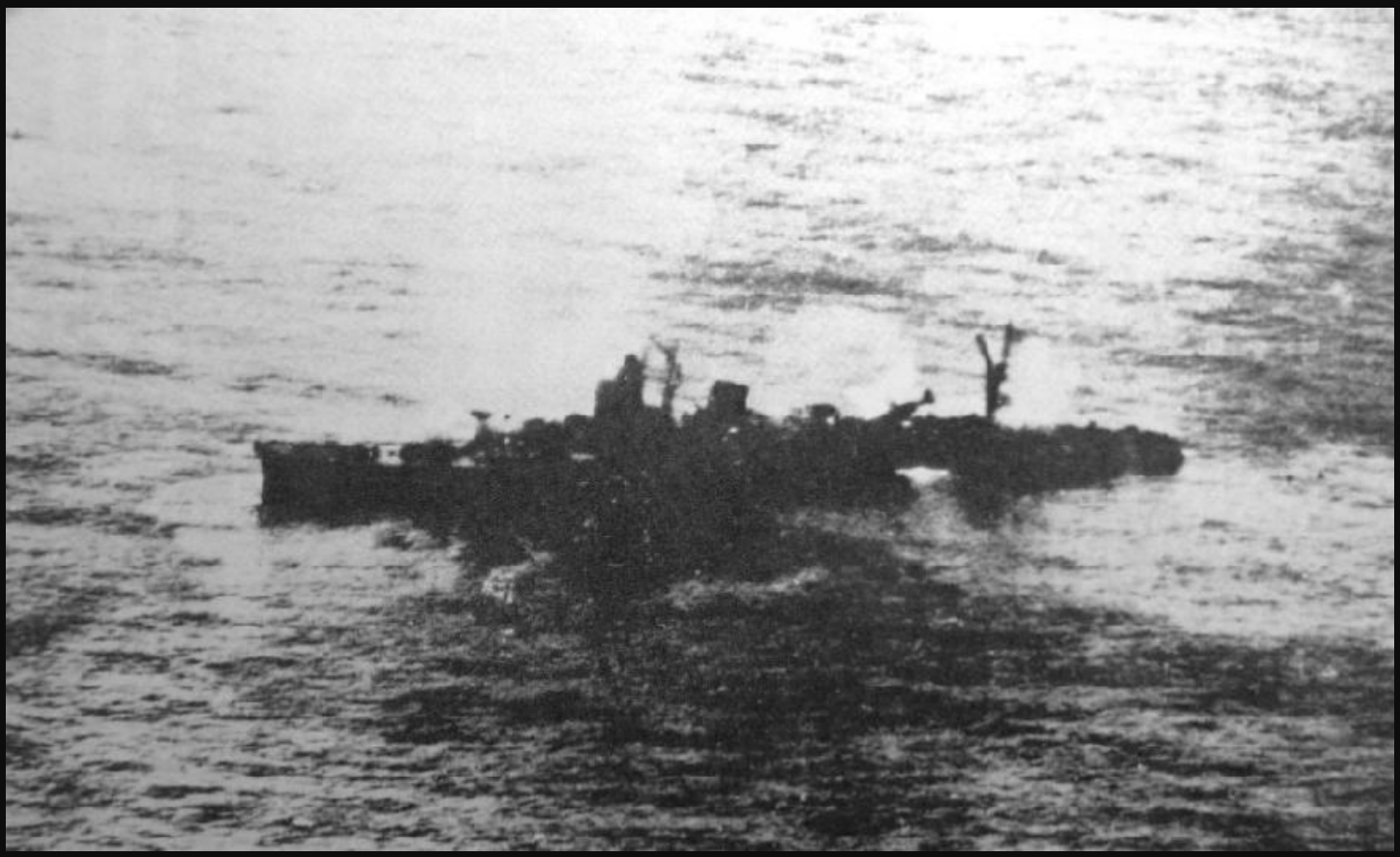
260. Operation Ten-ichi-go, April 6-7, 1945
Light Cruiser Yahagi churns along at 30 knots, zig-zagging to escape attack in the opening minutes of the attack.

261. Operation Ten-ichi-go, April 6-7, 1945
Photo courtesy of Anthony Tully who writes:

"Photo from Belleau Wood plane showing his bomb just missing the speeding cruiser Yahagi to starboard about 1240. At this point, the reader can see Hara's vivid description of how his cruiser handled like a destroyer in action. But it would not last long."



262. Operation Ten-ichi-go, April 6-7, 1945
Closeup up of the preceding photo. Note the smoke amidships, likely from her own intense AA fire. She would shortly be crippled and brought to a standstill by a torpedo that blew up her engine room, killing everyone inside.

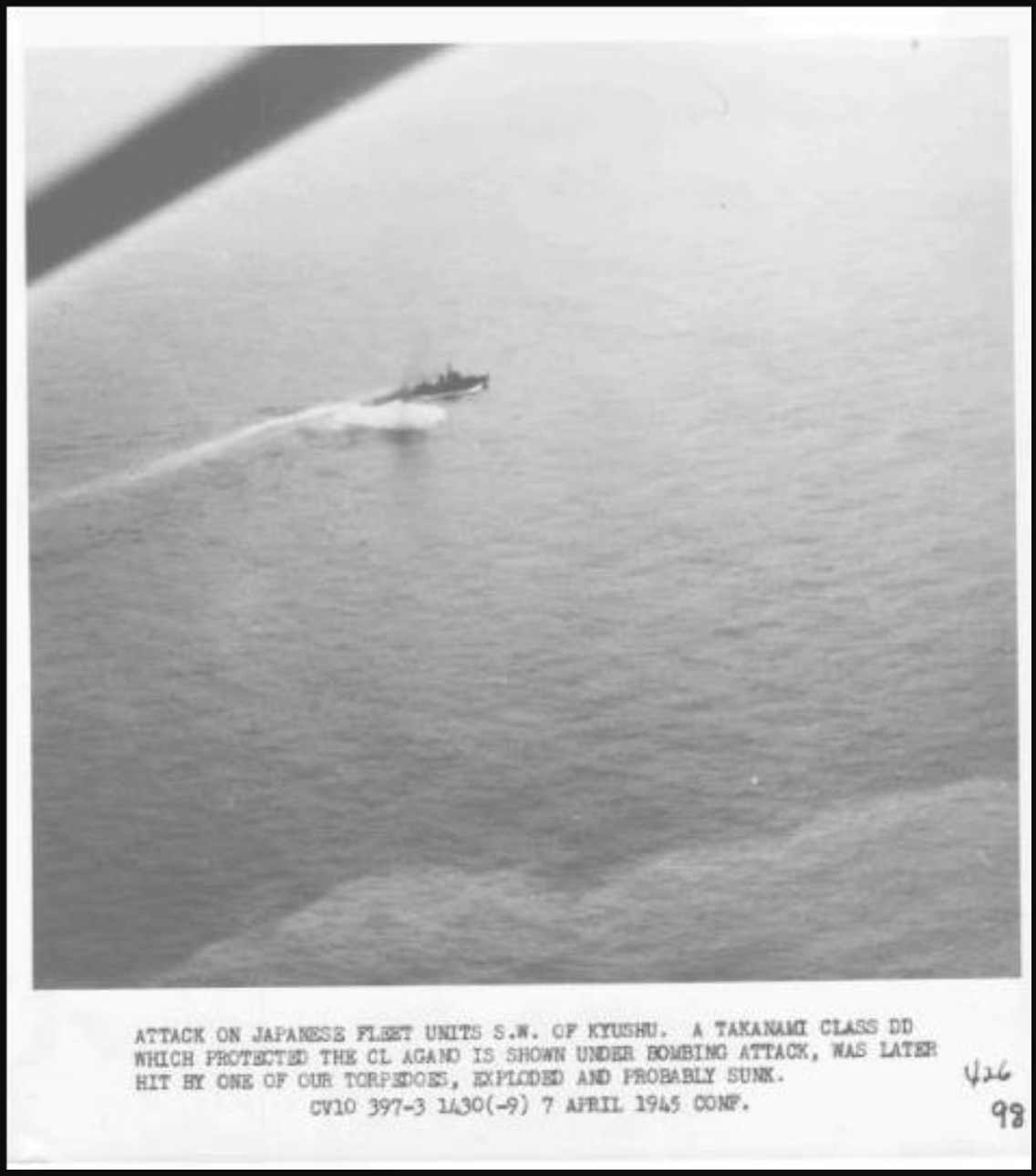


263. Operation Ten-ichi-go, April 6-7, 1945
Yahagi adrift and leaking oil after being torpedoed. She would become a sitting duck for later USN attack flights.

264. Operation Ten-ichi-go, April 6-7, 1945

Destroyer Isokaze (top right) comes to Yahagi's aid but is quickly attacked, heavily damaged, and sinks sometime later.

Anthony Tully describes this photo: *"In this striking photo taken just after 1330 the Yahagi's remarkable severe stern damage is clear while the cruiser appears otherwise still sea-worthy. But she is cold-dead in the water, just as Captain Hara described. Isokaze has just been signaled to attempt to shift the flag. The approach of the Yorktown planes made her break off the effort for now. (The signal to approach was made at 1328 so Japanese and American records agree nicely here)."*



ATTACK ON JAPANESE FLEET UNITS S.W. OF KYUSHU. A TAKANAMI CLASS DD WHICH PROTECTED THE CL AGANO IS SHOWN UNDER BOMBING ATTACK, WAS LATER HIT BY ONE OF OUR TORPEDOES, EXPLODED AND PROBABLY SUNK.
CV10 397-3 1430(-9) 7 APRIL 1945 CONF.

426
98

265. Operation Ten-ichi-go, April 6-7, 1945

Anthony Tully provided this photo and writes that it is of Isokaze, speeding away from Yahagi after coming under attack:

"This photo is sometimes identified as Asashimo but context shows it is Isokaze and the oil slick of Yahagi is visible with the cruiser just off-screen as Isokaze speeds away after the first failed attempt to transfer the Desron 2 flag. The Kagero-class DDs were routinely mis-identified as either Takanami-class or a `new type DD.'Only the clearest views proving a No.2 turret still in place could distinguish at this distance. Besides, Asashimo was gone by now."

266. Operation Ten-ichi-go, April 6-7, 1945

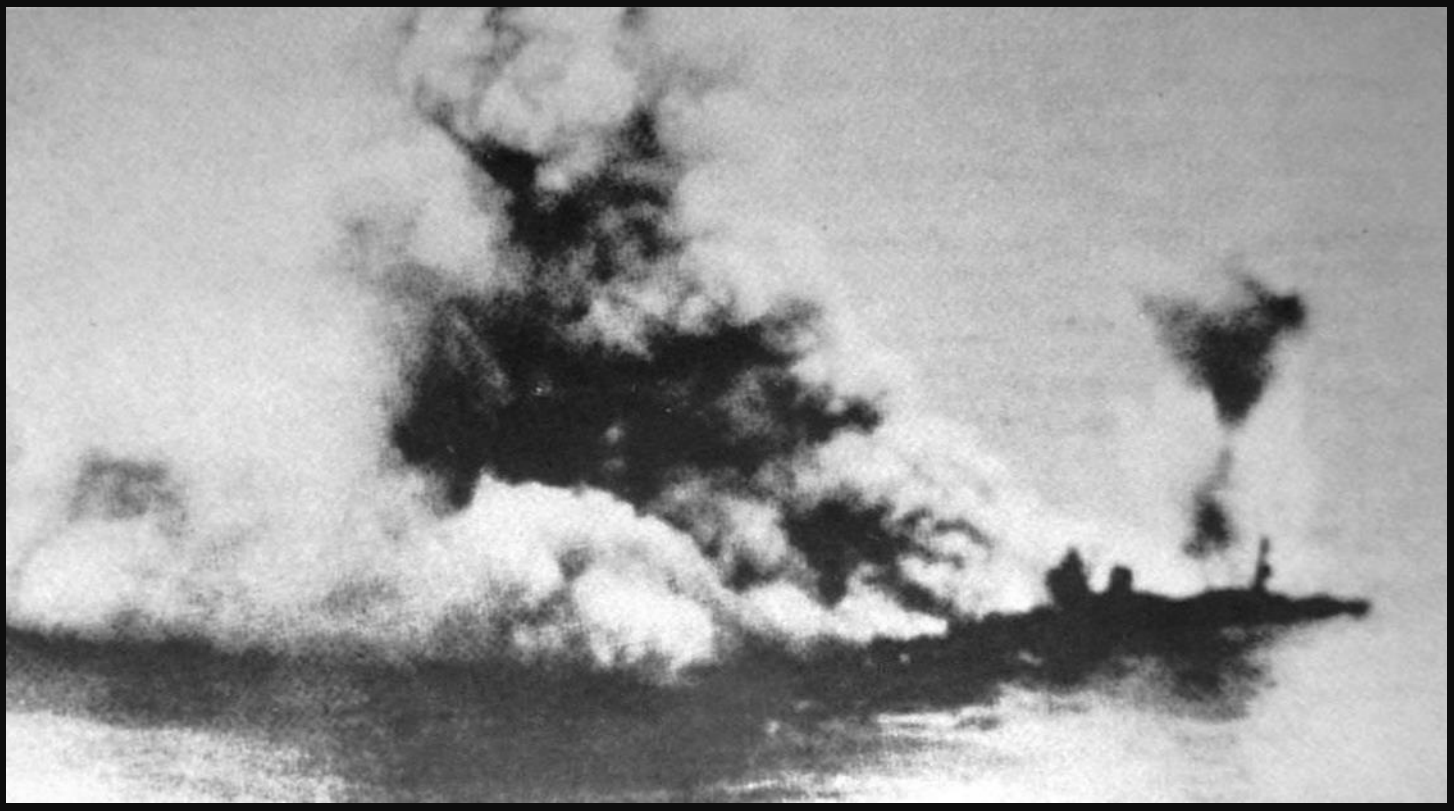
Photo courtesy of Anthony Tully. Yahagi is dead in the water here as successive waves of USN planes prepare to descend on her with bombs and torpedoes. This is one of the most well-photographed aerial attacks on an IJN ship in all of the Pacific War. Some of the following photos are terrifying in their sheer brutality.

Anthony Tully writes: *"Most photos of YAHAGI being sunk are from YORKTOWN, but this one is from USS LANGLEY's final torpedo attack at the same time."*

267. Operation Ten-ichi-go, April 6-7, 1945
Bombs rain around the motionless cruiser Yahagi, bleeding oil from the early aft torpedo hit that killed everyone in the engine room. She is already starting to go down by the stern, a part of which appears to have been blown off.

Colorized photo courtesy of Irootoko Jr.

268. Operation Ten-ichi-go, April 6-7, 1945
A wider, higher resolution version of the previous photo - make sure you zoom in.



269. Operation Ten-ichi-go, April 6-7, 1945
An enormous cloud of smoke from the detonation of bombs or torpedoes erupts from Yahagi's forward deck, while another bomb or torpedo hits her near her stern.

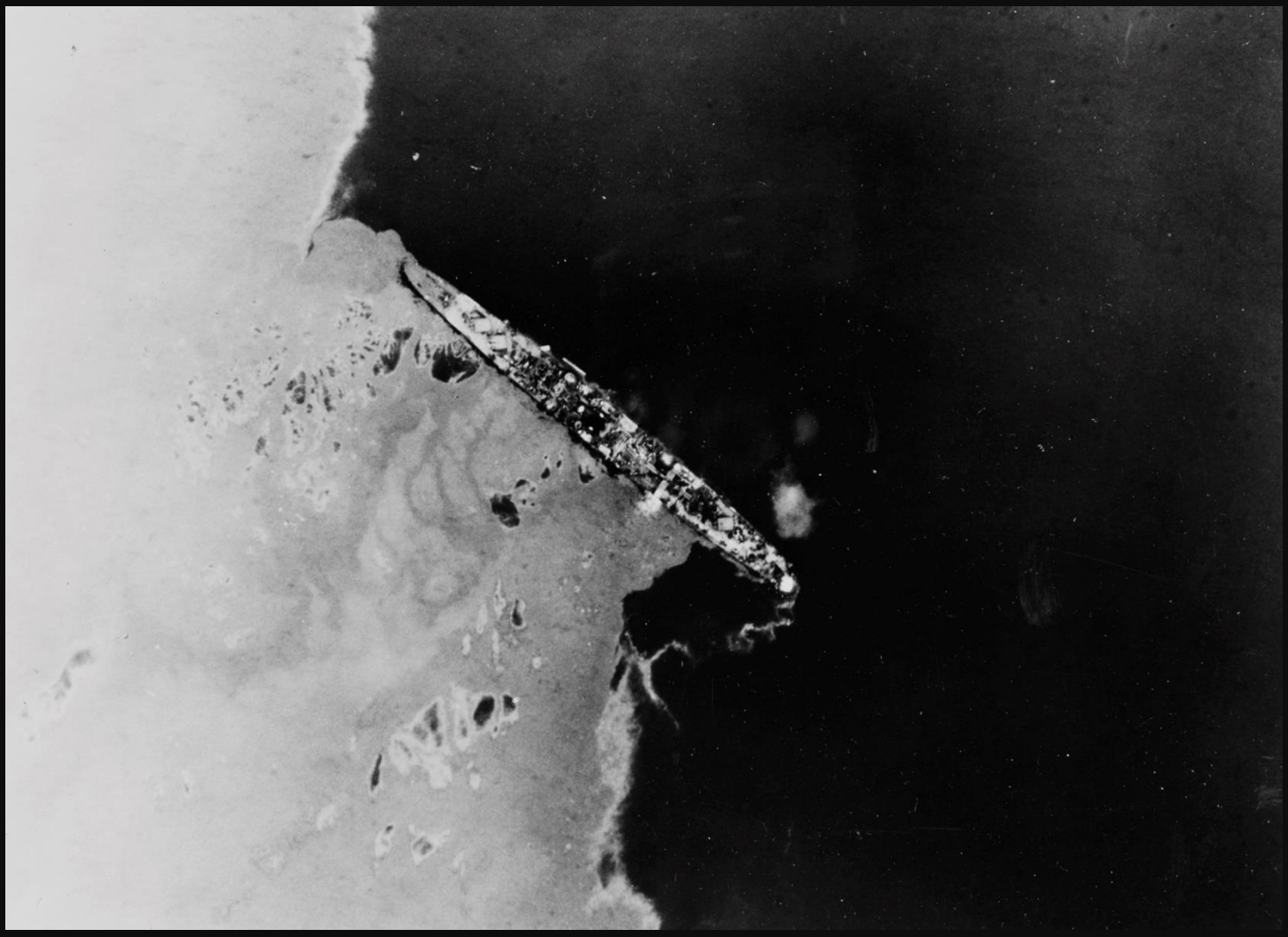
270. Operation Ten-ichi-go, April 6-7, 1945

A few seconds later the second photo captures Yahagi (at lower right mostly obscured by water and smoke) enduring further detonation of torpedoes and bombs. Please zoom in to see detail as this is a high resolution photo. It is difficult to believe any of her sailors could survive detonations such as the ones captured in this frame of film, but they did, including Capt. Hara who survived to write a post-war memoir of his experiences.

271. Operation Ten-ichi-go, April 6-7, 1945
Yahagi dead in the water and leaking oil - note the stream emanating from the partially blown-off stern of the ship.

This is a high resolution photo – so zoom in.

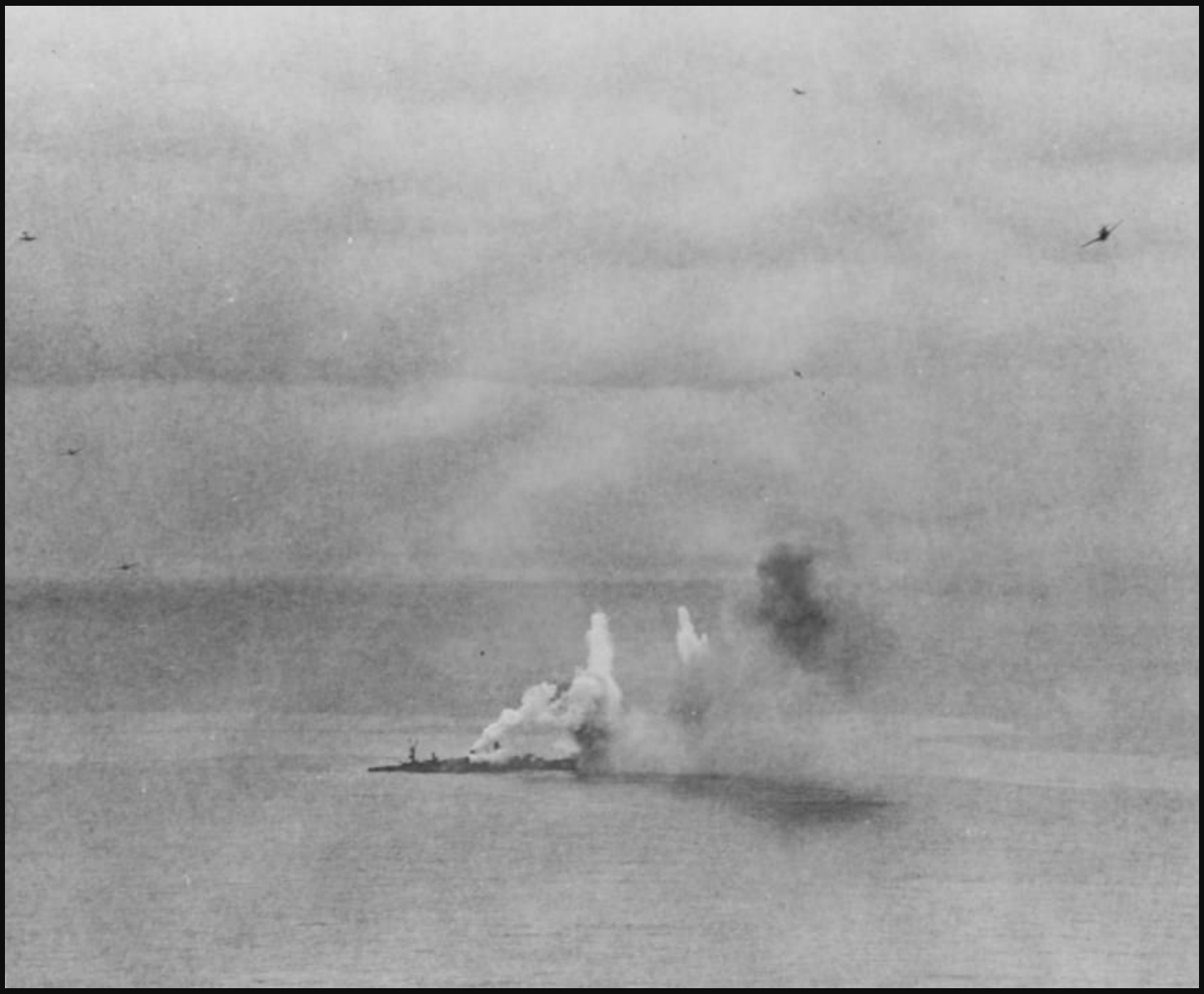
Anthony Tully adds: *"This and following photos of YAHAGI taken by photo plane from USS YORKTOWN (CV-10)."*



272. Operation Ten-ichi-go, April 6-7, 1945
Closeup of Yahagi shows more details.

273. Operation Ten-ichi-go, April 6-7, 1945
Another (vertically flipped) view of the same photo. Anthony Tully provides us with more information:

"This photo was taken by a TG 58.3 aircraft around 1345, but shows Yahagi before attacked again and so basically how Bennington's attacks left her dead in the water and crippled. The smashed fantail from the hit aft and oil slick from the torpedo hit amidships are prominent."



274. Operation Ten-ichi-go, April 6-7, 1945
US Navy planes ring the motionless Yahagi like a swarm of angry wasps, striking it with multiple torpedoes and bombs. At least 10 USN planes are visible in this photo, including several executing dives on the sinking ship (see upper left).

275. Operation Ten-ichi-go, April 6-7, 1945

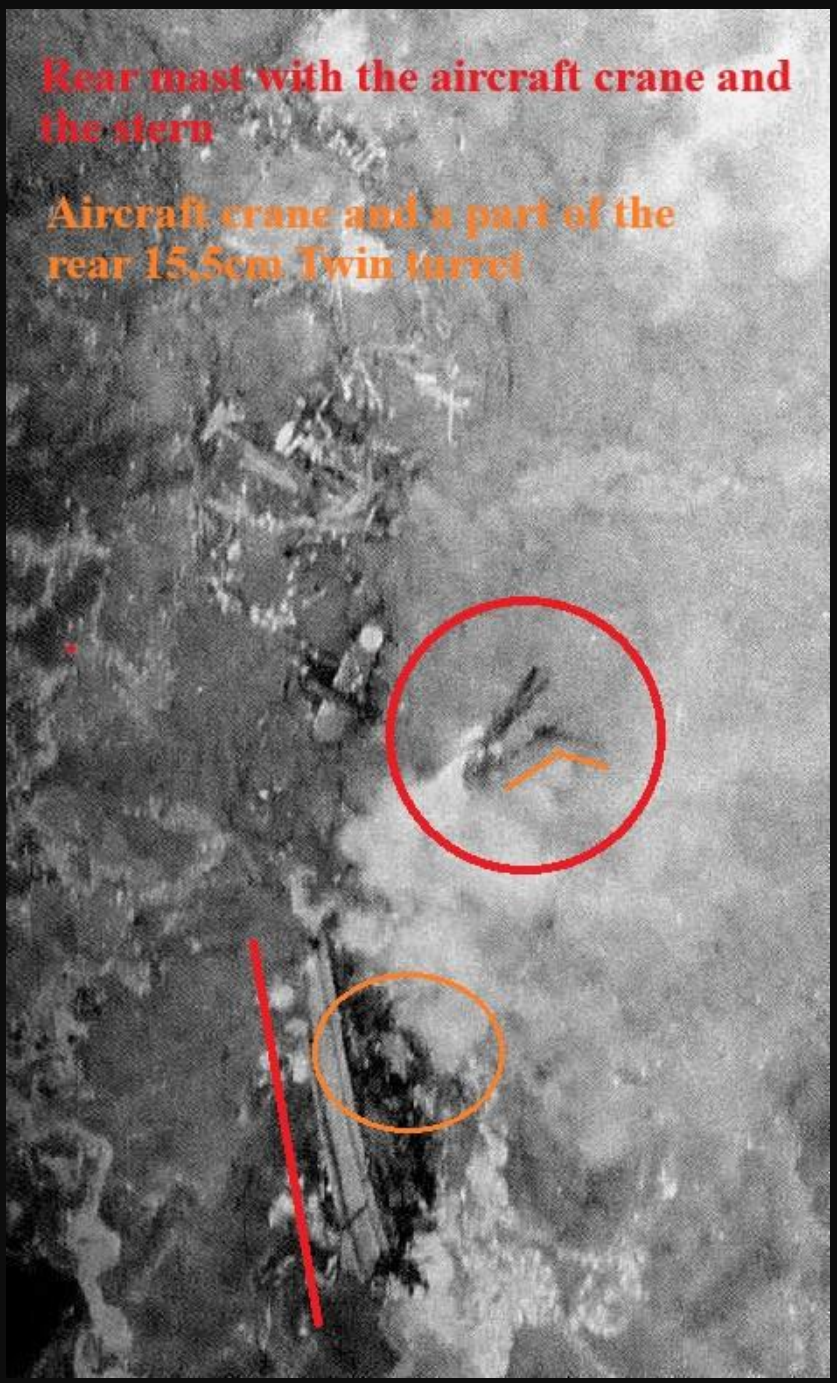
Still under bombardment, the Yahagi is going down fast. Note the US Navy planes above. Six late arriving torpedo bombers from the USS Yorktown and another carrier saw that Yahagi was done for and instead diverted their attack to the heavily listing Yamato, delivering her death blow - as is described in more detail later.

276. Operation Ten-ichi-go, April 6-7, 1945
Yahagi breaks up as she sinks. It appears that by this point in time her bow had been blown off by a torpedo (see the bottom of the photo). Note her float plane visible in the water near the center of the photo. One of the two planes was sent home after the ship navigated out of the Inland Sea. The second one suffered engine problems so her pilot got his final wish to participate, and die, in her final mission.

The Yamato likewise sent her remaining float planes home at the same time on April 6, 1945, and carried none of them into the final battle. They would have been useless inflammables.

Anthony Tully writes:

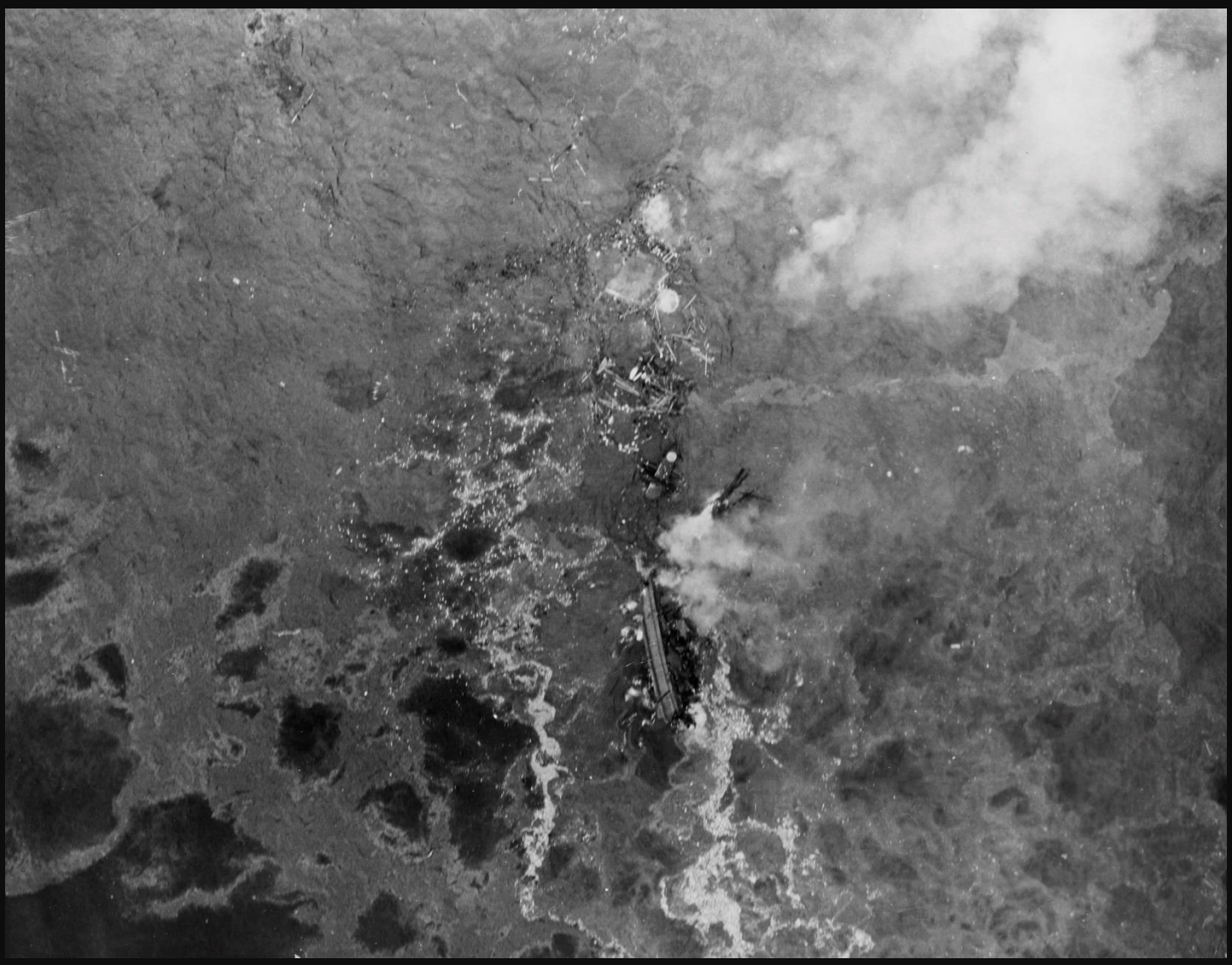
"This often published picture shows the last moment of the Yahagi, but it doesn't appear to be realized just how much it shows. It is not simply floating wreckage like the floatplane, but is in fact the last moment. Yahagi's gutted port fantail is still just above water and we see the mainmast submerging with most of the cruiser already under the waves. This photo in fact shows the full ship, albeit most of it just now submerged. The floatplane had come adrift from its catapult just as that part of the cruiser went under and roughly marks the location of the catapult."



277. Operation Ten-ichi-go, April 6-7, 1945

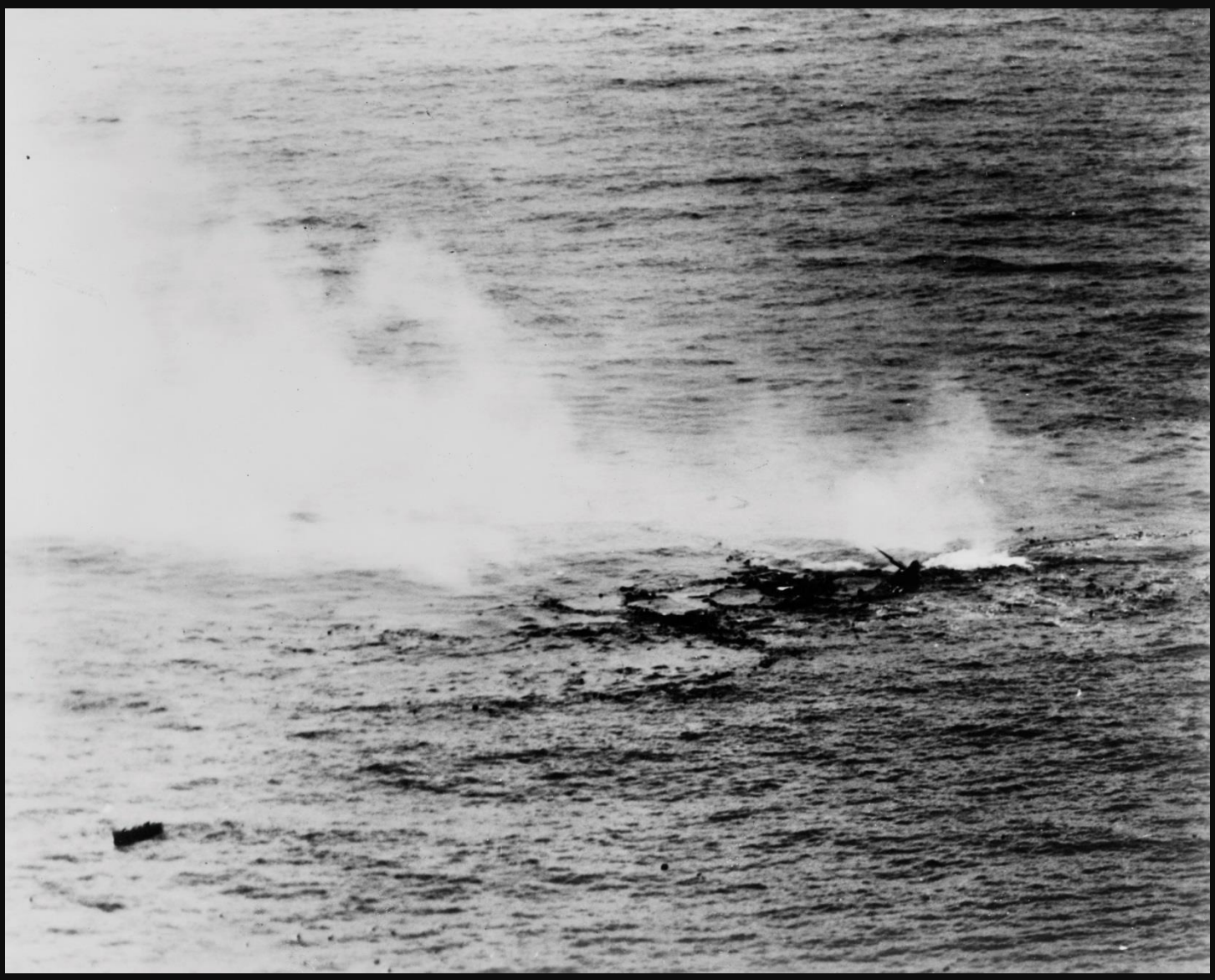
Christian Van Der Sanden writes: *"What you here see above the seawater is the stern section! You can see a part of the rear 15,5cm twin turret. Best indication is the black rear mast with the airplane crane. See the attached photo/version."*

278. Operation Ten-ichi-go, April 6-7, 1945
Another view.



279. Operation Ten-ichi-go, April 6-7, 1945

And another. This is a high resolution photos, so please “Zoom In” to see more details.



280. Operation Ten-ichi-go, April 6-7, 1945
Yahagi slips under the waves - note what appears to be a lone lifeboat on the left.

281. Operation Ten-ichi-go, April 6-7, 1945
Yamato plows forward. Make sure to zoom in – this is a high resolution photo.

282. Operation Ten-ichi-go, 6-7 April, 1944
Flak bursts are visible as Yamato continues moving forward despite the aft fire and numerous torpedo hits. Note that she is down at the bow. Zoom in and you will see a number of Navy planes above Yamato (little black dots) and two planes above the destroyer on the right that appear to be coming in to attack Yamato from the port side, as well as at least 2 planes above and to the right of the lead destroyer.

US Navy Caption: *"Japanese battleship Yamato listing to port and down at the bow, during attacks by U.S. Navy carrier planes north of Okinawa, 7 April 1945. One of her escorting destroyers is at left. The original photo caption reads: 'Japanese battleship Yamato lists to port (at right) just prior to VT-9 (USS Yorktown) torpedo attack, 7 Apr. 1945. She is making 10 to 15 knots. A Japanese destroyer cruises ahead.' Photographed from a USS Yorktown (CV-10) plane."*

Anthony Tully describes this photo*: "One of few surviving photos from USS BUNKER HILL planes. Taken just before torpedo attack. Fuyuztzuki in front. Yamato smoking from bomb hits from USS ESSEX planes."*

283. Operation Ten-ichi-go, 6-7 April, 1944
A close up of the ship from the previous photo reveals the ferocity of the final attack; the rear of the ship appears completely engulfed in smoke and explosions.

284. Operation Ten-ichi-go, 6-7 April, 1944
Another photo taken seconds after the last one by the same plane shows an enormous cloud of smoke obscuring the rear of the ship due to (presumably) multiple bomb detonations. Photo courtesy of Anthony Tully.

Anthony Tully writes*: "One of few surviving photos from USS BUNKER HILL planes."*

285. Operation Ten-ichi-go, 6-7 April, 1944

Anthony Tully also provides the wider version of the prior photo and turns our attention to the destroyer on the R:

"Fuyutzuki is seen here hard in action, fending off attackers from Yamato and herself... One of few surviving photos from USS BUNKER HILL planes. Taken just before torpedo attack. Fuyuztzuki in front."

286. Operation Ten-ichi-go, April 6-7, 1945
Yamato falls further behind her remaining escorts as her hull slowly fills with water from the torpedo hits.

287. Operation Ten'ichigo, April 6-7 1945
"This giant body is left to total disintegration; its parts, lacking connection with each other, head separately on the path to destruction…

A chunk of human flesh, thin but the size of a man, hangs down from high atop an arm of the range finder and sways unceasingly.

Where did it come from? That's ten meters above the deck...Because of the excessive list, the shells of middle size and above cannot be moved. The carts carrying the shells would tip over; it is still more dangerous to carry them by hand.

The anti aircraft guns and the secondary guns are completely silent. Only the machine guns remain for the last desperate battle…

Countless bullets have poured in on the bridge. The attrition among the men is severe. A bomb falls at us from straight ahead, grows in almost no time - a black dot, a pebble, a spindle. Just as I hold my breath thinking it will land right on top of us, it whizzes past, barely missing our heads, and falls away."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

Yamato is under attack during the third and final wave - note the geysers in the water near the aft of the ship, probably caused by US Navy planes' .50 cal machine gun fire. Look closely above Yamato - you can see 4 dots that are probably US Navy planes. Destroyer in foreground is Fuyutsuki.

Anthony Tully writes: *"Photographs by an INTREPID plane."*

288. Operation Ten-ichi-go, 6-7 April, 1945
A close-up of the ship from the previous photo shows geysers of water near the stern, undoubtedly from USN planes' .50 cal machine gun fire.

Note how low in the water Yamato is in front, and also listing to port, with the rear of the ship obscured by smoke.

Photo taken just before the Yorktown squadron delivered the third and final attack. Photographed from a USS Intrepid plane.

289. Operation Ten'ichigo, April 6-7 1945
In the middle of the final wave.

Official Navy caption reads:

"Japanese battleship Yamato (top) and a destroyer in action with U.S. Navy carrier planes north of Okinawa on 7 April 1945. Yamato appears to be down at the bow and moving slowly after being hit by multiple air attacks. The destroyer is either Fuyutzuki or Suzutsuki, and appears to have fired her after 10cm guns at the instant this photo was taken."

Christian Van Der Sanden identifies this destroyer as Fuyutzuki, however, adding:

“At this late stage of the battle Suzutsuki was out of action due to her heavy bomb damage on her starboard side behind the second 10cm twin turret on the bow.”

This is a high resolution photo - make sure you zoom in.

290. Operation Ten'ichigo, April 6-7 1945

"The fourth wave comes flying at us from the port bow. More than 150 planes. Several torpedoes gouge sections out of the port side. Many bombs score direct hits on aft tower, aft deck. The attack on the bridge becomes ever fiercer.

After the planes release their bombs and turn from side to side, they press in directly at the bridge with all guns blazing...

Coming in again and again on the ideal approach, precisely, exactly, calmly, they evoke in us a sense of exhilaration. Virtuosi. Theirs is a strength we cannot divine, a force we cannot fathom...

Suddenly a heavy weight falls on me from three directions - front, rear and left side. The sailors in front of me and behind me and the officer on my left, all within elbow-rubbing distance, have been struck down simultaneously....

Those three bodies, of Ensign Nishio and the two sailors, saved me by shielding me from flying shrapnel. We were less than a foot apart.

My uniform is red in several places, dyes with spatters of blood."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

(Note that Yoshida's reference to the "fourth wave" is mistaken. From the ship, it appeared as if the Yamato was subjected to 5 waves of attacks, but US Navy records show that there were only 3 concentrated attacks on the ship.)

As Yamato enters her death agony during the third attack wave, burning and clearly down at the bow, moving at about 12 knots at best, one of her remaining destroyers (Fuyutzuki or Suzutsuki) fires a salvo at Navy aircraft from her front 10cm batteries.

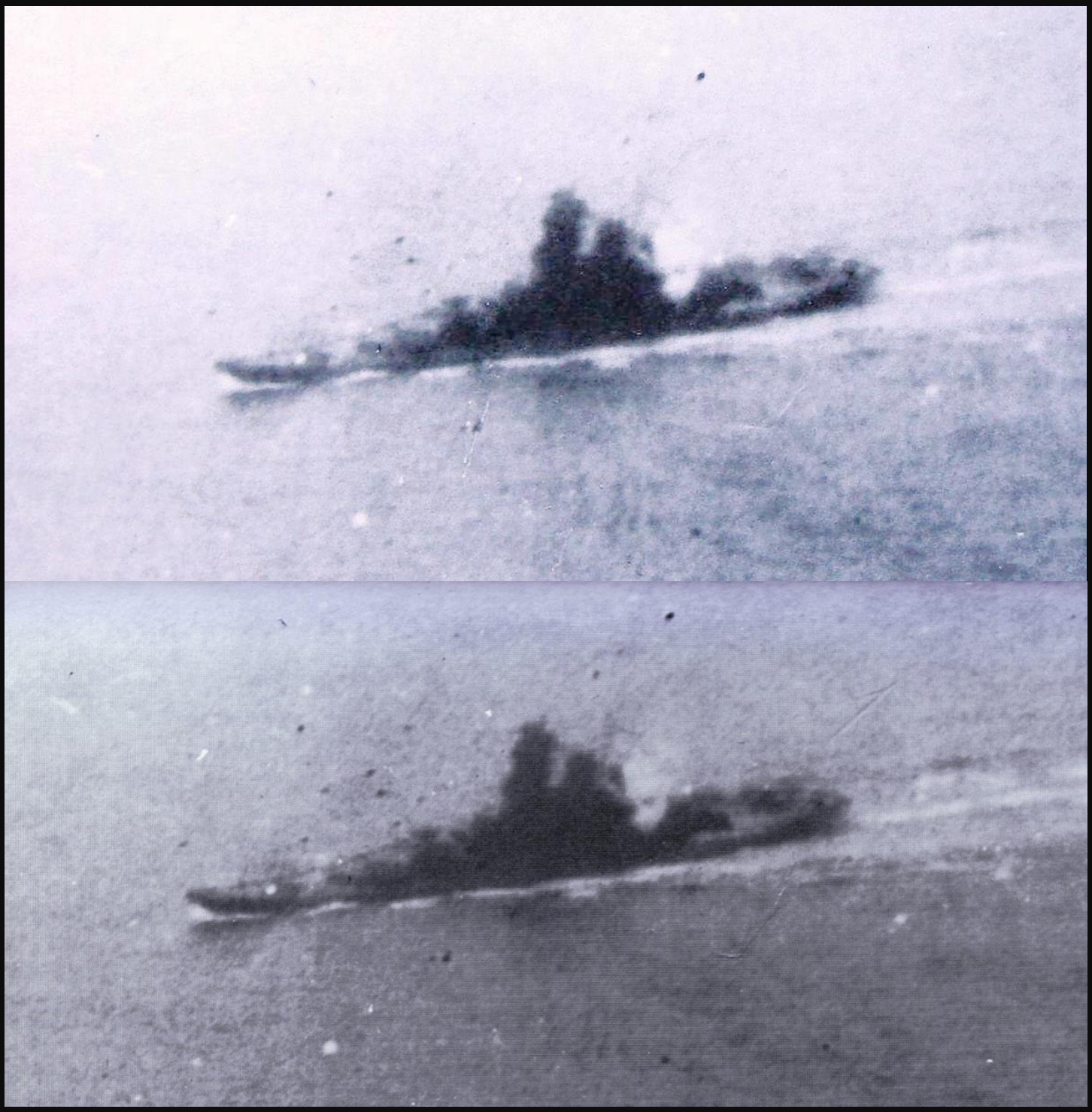
Note also Navy planes above Yamato (several tiny black dots including a plane that appears to be dive bombing in the air above the ship's funnel. Zoom in to see the USN planes – 3-4 are clearly visible. The destroyer firing her AA guns is Fuyutsuki.

Photographed from a USS Yorktown (CV-10) plane.

291. Operation Ten'ichigo, April 6-7 1945
Anthony Tully writes:

"An important photograph is arguably the last taken of Yamato before she capsized and blew up. Slightly blurry, it is nonetheless precious for this photograph was taken by a Yorktown plane as VT-9 formed up to attack her as Yamato continued to steam at a good pace of 10 knots or more southwesterly, with about 10 degree or so list to port. Notice that the fore-and-aft trim is almost even, only somewhat down at the bow. Time about 1405. Just moments later, Aruga would turn north."

This is a high resolution photo - make sure you zoom in.



292. Operation Ten'ichigo, April 6-7 1945

The last photo at two different resolutions...there are a score of USN planes visible on strafing runs above the ship, now bereft of any AA fire.

This photo might actually have captured the 6 planes from Lt Stetson's flight pulling up over Yamato's forward section after dropping what would be the "coup-de-grace" torpedo strike that caused her to capsize minutes later – look how close she must already be to keeling over. Yoshida writes:

"List: 35 degrees... ..American planes..rush in for the kill... We are unable to take evasive action, so all the bombs hit their target; prostrate on the deck of the bridge, we endure the concussions.

The death-blow bombing is brutal, not a single bomb wasted. The precision is surgical...they may be the enemy, but they are doing a splendid job. I experience the elation of being taught by true professionals....

Amid all this, men crawling to the chair of the commander in chief: the staff officers, aren't they? The final conference?..

On reflecting afterward, I realize that in that moment the admiral had reached the direct and resolute conclusion: 'Stop the operation'.

The chief of staff edges forward, bracing his left arm on the compass, and salutes the admiral...

The admiral returns the salute, and the eyes of the two men meet....

He (Admiral Ito) shakes hands warmly with the several staff advisers who crawl up to him...

Turning his tall body about, he departs via the ladder to the admiral's private quarters directly under the bridge.

Thus comes to an end the role the admiral has played in our presence, he who since the battle began has remained utterly aloof and has not stirred in the slightest...was this his silent protest against the fate of being remembered as the highest-ranking officer of an operation that will live in naval annals for its recklessness and stupidity?

A man of refreshing directness, the tall and graceful Admiral Ito.

Fondling his pistol, did he experience with his own body the death of the ship?

Thus the last moments of Vice Admiral Ito Seiichi, commander in chief of Task Force II...

It must have been his cherished ambition to die in the line of duty as commander of the last task force sent into battle by the Imperial Navy"

Yoshida Mitsuru, "Requiem for Battleship Yamato"

US Navy Caption*:*

"Japanese battleship Yamato listing to port and afire at the after end of her superstructure, but still underway, while under attack by U.S. Navy carrier planes north of Okinawa, 7 April 1945. A torpedo plane's view of battleship Yamato. This is how Japan's mightiest warship appeared as six lone U.S. Navy torpedo planes raced in to destroy her. She is still making 10 to 15 knots, though fires continue to burn amidships."

This is an extreme close-up from a photo taken from a couple of miles away. The dots above the front of Yamato may be US Navy planes that have just strafed her, or completed their torpedo drops and are veering away.

Photographed from a USS Yorktown (CV-10) plane.

293. Operation Ten-ichi-go, April 6-7, 1945 - CGI Image

“Lieutenant Tom Stetson's torpedo bombers were supposed to attack Yahagi, but she was as good as gone..he...decided to go for the Yamato...Stetson could take four planes...The Yorktown pilots took their time. They circled in thinning clouds while crewmen leaned down into the torpedo bay to readjust the depth settings...Stetson ordered settings between 18 and 22 feet…

Yamato was listing and circling helplessly to port. Her list was so severe that the red-leaded starboard underbelly protruded well above the waterline. Hits here would tear the bottom out of her.

..Four planes spearheaded the attack in line abreast. The other two were close on their tails. They released at 800 feet, range 100 yards, unseen by the enemy.. Stetson saw at least four torpedo wakes streaking toward the unsuspecting battleship...One or two, maybe more, hit, smashing into the exposed underbelly below the armor belt."

pages 291-292, Russell Spurr, "A Glorious Way to Die"

"Enormous geysers rise on port and starboard sides amidships. I feel as if the deck has been swept out from under my feet. The navigation officer, with a sharp, inquisitorial tone in his voice: 'Captain, didn't you see that last torpedo?'…

Will this torpedo at last be the fatal wound? It delivers as hard a blow equivalent at least to the blast of several airborne torpedoes.

Has a submarine caught us off guard, approached, and zeroed in on us? Or, with our extreme list, with the armor plating along the hull now out of the water, have the torpedo bombers concentrated their torpedoes on the ship's exposed and vulnerable belly?

It has absolutely enormous power, this mysterious torpedo.

A fitting end, filled with mystery, for this giant ship. The needle of the inclinometer takes a marked leap."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

A note about the number of bombs and torpedoes that hit the Yamato is in order here: The official US Navy report gives the number conservatively as 7 bombs and 12 torpedoes (in addition to hundreds of wing-fired rockets and hundreds of thousands of .50 cal strafing machine gun rounds that created slaughter on the decks of the ship.)

But this report was not based on all of the after-action reports from the carriers taking part in the operation.

Reports by Navy pilots, though bound to be exaggerated by instances of two pilots both reporting a single hit as their own, for example, indicate that the actual numbers of hits may have been 3 times higher than the numbers quoted in the report above.

Survivors of the Yamato indicate about 18 bomb hits and around 20 torpedo hits

In the story of this operation as written in the "History of United States Naval Operations in World War II", Samuel Eliot Morison notes that at around 1400 hours:

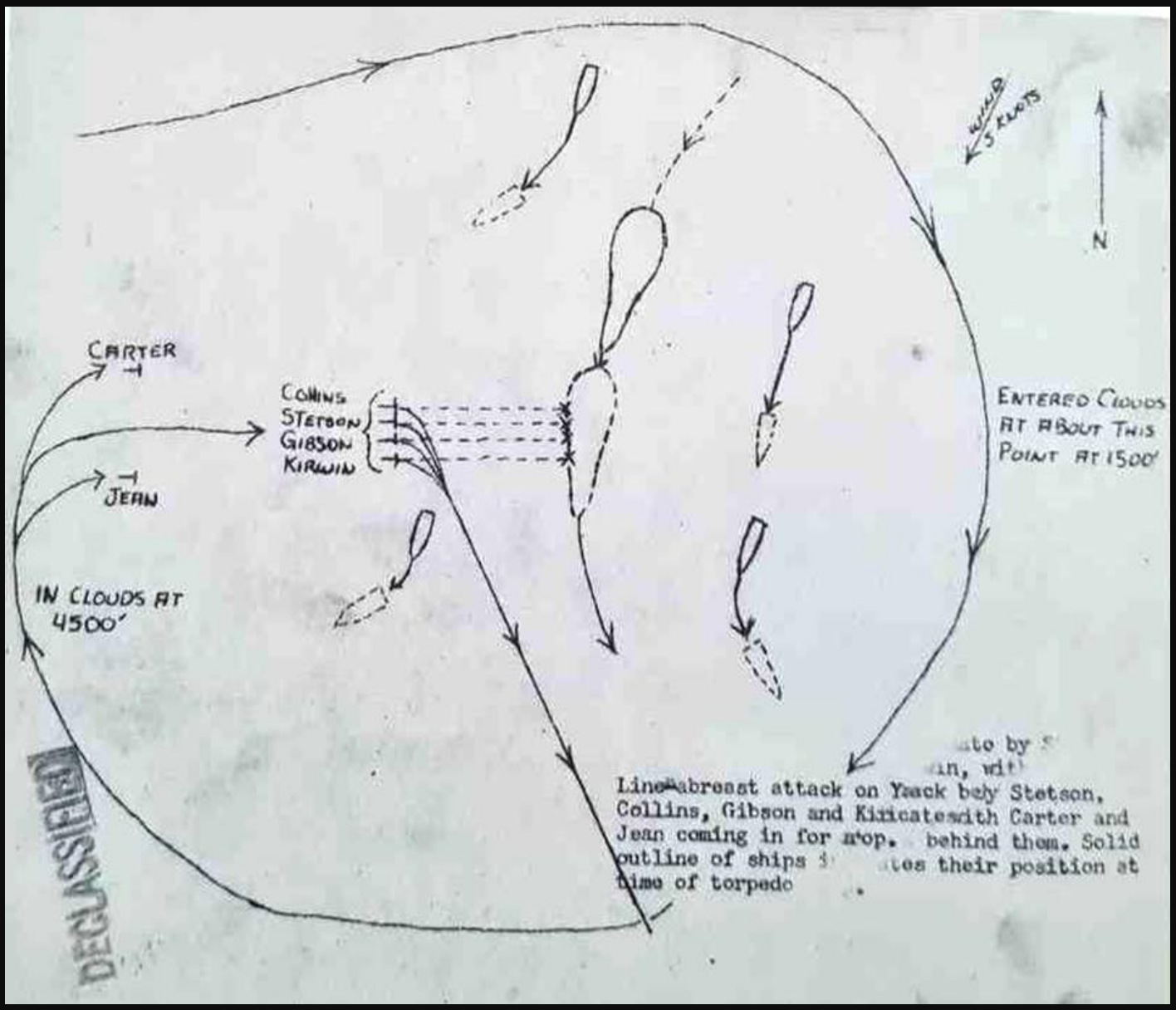
"...came the fourth major attack wave. Aerial torpedoes blew more holes in the port side and at least 10 bombs exploded on the decks."

This is consistent with Yoshida's account of bombs literally raining down on the ship after her speed dropped in half and then as she lay almost still in the water near the end. The carnage that he so vividly describes is corroborated by the stories of the other survivors.

The cause for the explosion of Yamato's forward #2 main powder magazine after she capsized, blowing the ship in two, was most likely started by detonation of the 18" "beehive" AA shells that rolled and hit the bulkheads as the ship capsized. They were known to be more volatile that the high explosive and armor piercing 18" shells. (In fact, capsized Japanese battleships had an unnerving tendency to blow up during WW2, as pointed out by Lundgren in his book on Leyte Gulf.)

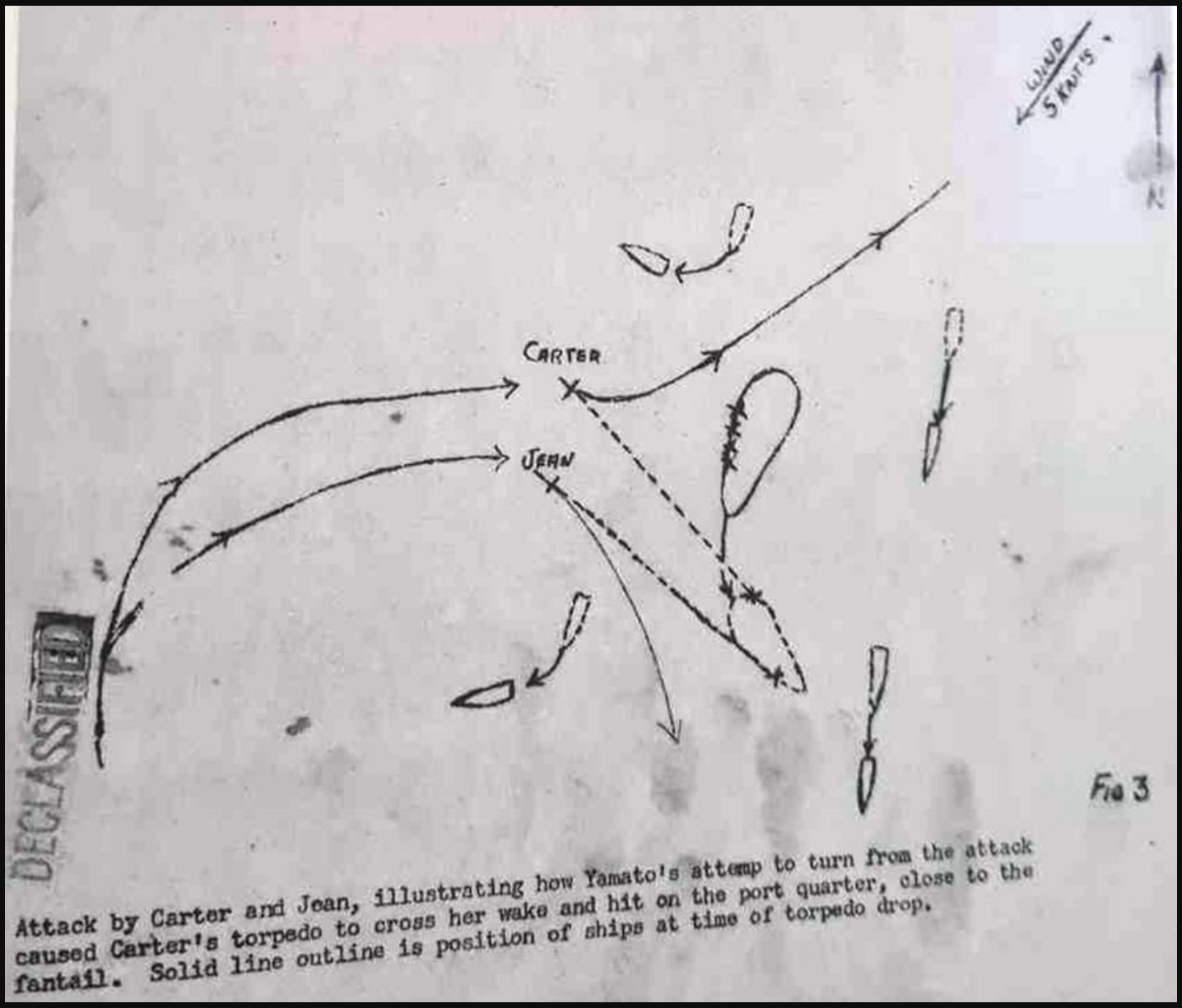
A CGI re-creation of the torpedoes from Lt. Stetson's flight delivering the death blow to Yamato.

This is a still from the CGI film "Yamato's Final Battle" which I have uploaded to Youtube. See the links page.


WIND 5 KNOTS
N
CARTER
COLLINS
STETSON
GIBSON
KIRWIN
JEAN
IN CLOUDS AT 4500'
ENTERED CLOUDS AT ABOUT THIS POINT AT 1500'
Line abreast attack on Yaack by Stetson, Collins, Gibson and Kinkaid with Carter and Jean coming in for atop. behind them. Solid outline of ships indicates their position at time of torpedo
DECLASSIFIED

294. Yorktown Pilots drop on Yamato report

Yorktown Pilots drop on Yamato report (Ten-ichi-go, April 1945). Chart provided by Christian Van Der Sanden in 2024.



Attack by Carter and Jean, illustrating how Yamato's attemp to turn from the attack caused Carter's torpedo to cross her wake and hit on the port quarter, close to the fantail. Solid line outline is position of ships at time of torpedo drop.

295. Yorktown Pilots torpedo drop on Yamato report

Yorktown Pilots drop on Yamato report (Ten-ichi-go, April 1945). Chart provided by Christian Van Der Sanden in 2024.

296. Operation Ten-ichi-go, April 6-7, 1945
1423 hours, April 7, 1945 - the capsized Yamato explodes in what was one of the largest conventional detonations of WW2 . The explosion was visible more than 200 miles away in the port of Kagoshima.

Note the three surviving destroyers circling the ship. If you look closely at the base of the explosion the Yamato's overturned hull appears to be visible.

US Navy Caption*:*

"The Japanese battleship Yamato explodes as she sinks, after receiving massive torpedo and bomb damage from U.S. Navy carrier planes north of Okinawa, 7 April 1945. The original photo caption reads: 'A split-second shot of Yamato as she blew up. A red ball of flame envelops this mightiest of Japanese battleships, and a moment later it shoots like a comet to the clouds, 2000 feet high.'"

Anthony Tully writes: *"Photographed from a USS Intrepid plane."*

297. Operation Ten-ichi-go, April 6-7, 1945

Escaping from the bridge, which was parallel with and dipping into the water, Ensign Yoshida describes being sucked under by the sinking goliath:

"The ship is already completely under water; I am in the whirlpool...

First, the fore magazine explodes. Twenty seconds after the ship went under?

Had there been no explosion, I would have sunk rapidly in the whirlpool, to the bottom of the sea.

At the instant Yamato, rolling over, turns belly up and plunges beneath the waves, she emits one great flash of light and sends a gigantic pillar of flame high into the dark sky. Armor plate, equipment, turrets, guns - all the pieces of the ship go flying off."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

US Navy Caption*:*

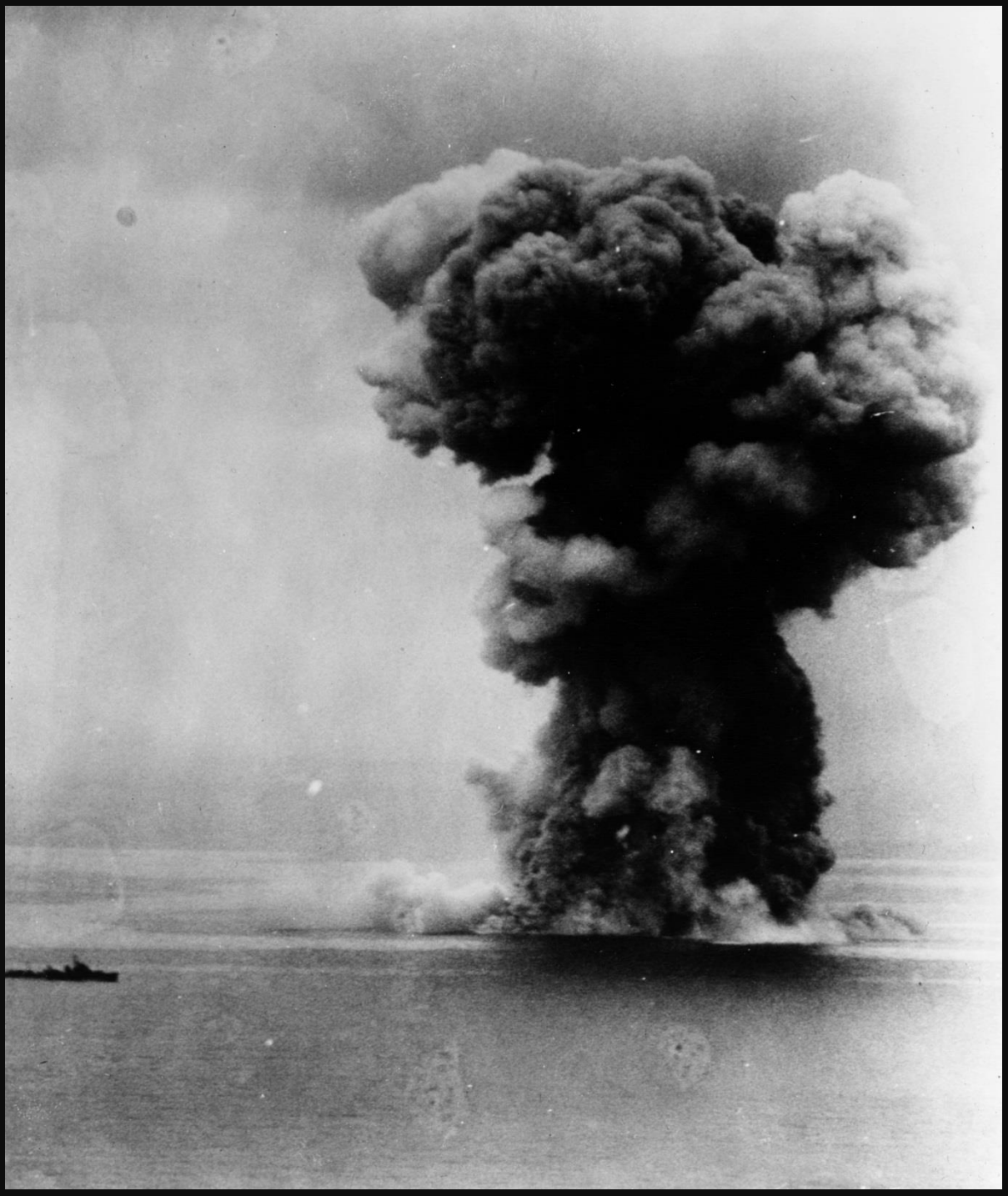
"Japanese battleship Yamato blows up after receiving massive bomb and torpedo damage from U.S. Navy carrier planes, north of Okinawa on 7 April 1945. Three Japanese destroyers are nearby."

Note that one of the destroyers is leaking oil and dead in the water. The other two are the Fuyutzuki and Suzutzuki.

The Captains of the Fuyutzuki and Suzutsuki refused the order to come alongside the Yamato in her final moments in order to transfer her crew due to their fear of having their vessels dragged down in the Yamato's huge whirlpool as she sank.

It turned out to have been the correct decision. Had they obeyed the order, both ships would have perished in the explosion.

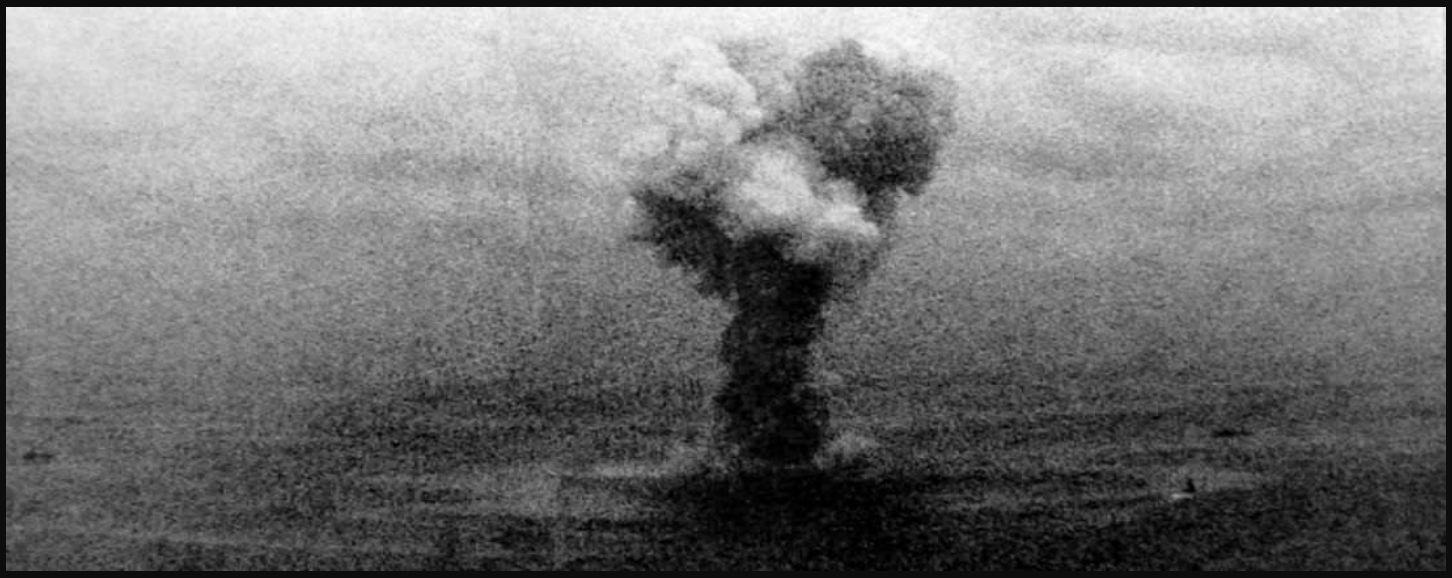
Photographed from a USS Yorktown (CV-10) plane. Colorized photo courtesy of Irootoko Jr.



298. Operation Ten-ichi-go
Closeup view of the previous photo. Photographed from a USS Yorktown (CV-10) plane.

Anthony Tully writes:

"The Yorktown VT-9 which took such memorable photographs also gave an important description of the nature of Yamato's final roll which affirms she did not founder and sink; she rolled over: 'Despite these successive hits, the Yamato was not immediately stopped...once outside AA range, Stetson and his division saw that the Yamato's list had increased. Within five minutes she was starting to heel over. Suddenly, she toppled and hardly had her hull rolled over on one side than a violent explosion enveloped the ship and sent a column of flame shooting up through the clouds, 2000 to 3000 feet in the sky. When flames and smoke subsided, only a mammoth oil slick remained to mark the Yamato's grave.'"



299. Operation Ten-ichi-go, April 6-7, 1945

"The pressure generated by the explosion of the fore magazine alone is not equal to that of the whirlpool.
While being tossed about in the whirlpool, my whole body absorbs the extraordinary concussion of the shock wave from the first explosion; I am thrust back, around, and up, crashing into a thick wall overhead.

This wall: the corpses of comrades who surfaced quickly and are now being baptized in the fiery rain.

Did they shield us with their bodies from the arrows of fire?..

Then, about twenty seconds later, the second explosion. Perhaps part of the aft magazine? This blast finally hurls my body up to the surface…

Had the second explosion come even five seconds later, my lungs would have burst. It would have been all over with me."

Yoshida Mitsuru, "Requiem for Battleship Yamato"

Note the three surviving destroyers circling the ship.

After 3 harrowing hours in the oil-covered water, Yoshida and 268 others are rescued by the destroyers Fuyutsuki and Hatsushimo.

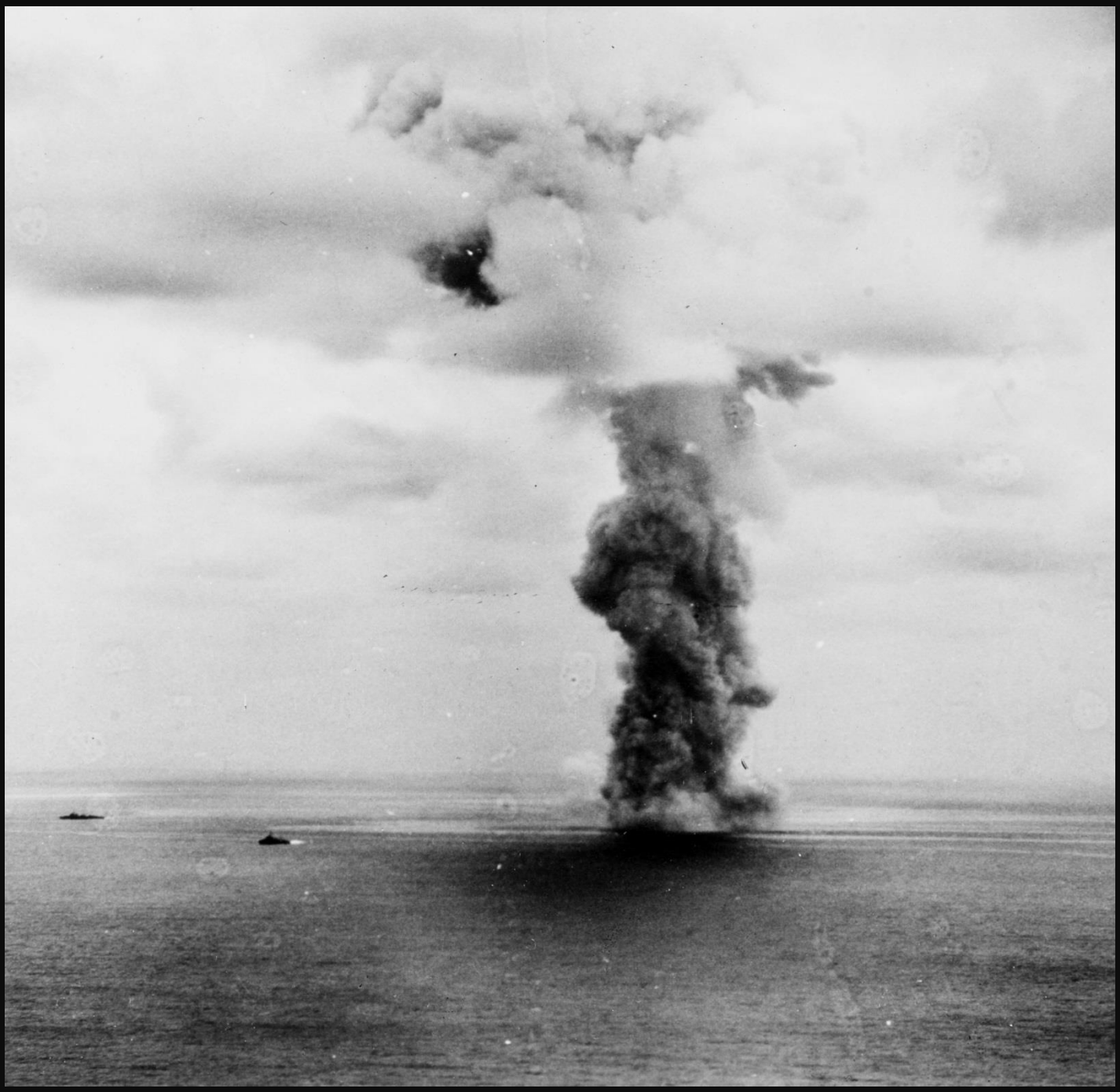
The dead from Yamato alone number over 3,000 - making this the largest loss of life ever on a single warship.

446 men of the crew of Yahagi perish, along with another 500 or so on the 8 destroyers, only 3 of which make it back to port in Kure.

Against this score of 7 ships sunk and 4,000 men killed, the US Navy lost just 10 planes and 12 pilots.

Since the sinking of the Yamato, no nation has built another battleship.

Anthony Tully writes: *“Photographed from a USS Intrepid plane.”*



300. Operation Ten-ichi-go, April 6-7, 1945

"The navigation officer on one of the destroyers calculated that the pillar of fire reached a height of 2,000 meters, that the mushroom cloud rose to a height of 6,000 meters... Opening out like an umbrella, the top of the pillar of light engulfs and destroys several American planes circling to observe the end."

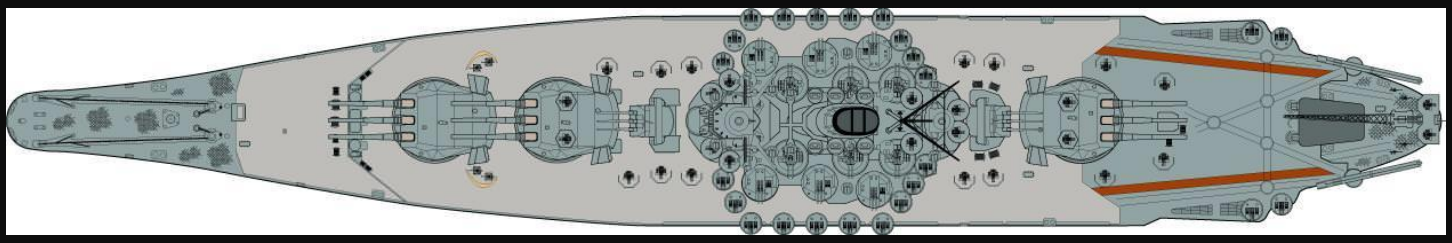
Yoshida Mitsuru, "Requiem for Battleship Yamato"

Photographed from a USS Yorktown (CV-10) plane.

301. Operation Ten-ichi-go, April 6-7, 1945
Yamato's mushroom cloud bears an eerie resemblance to the much larger mushroom clouds that would engulf the cities of Hiroshima and Nagasaki a few months hence. Photographed from a USS Yorktown (CV-10) plane.

"Yamato sank and her giant body lies shattered 200 miles northwest of Tokunoshima. 430 meters down. Three thousand corpses, still entombed today. What were their thoughts as they died?"

Yoshida, Mitsuru, "Requiem for Battleship Yamato"



302. Yamato 1945 Deck Configuration
The final configuration of the Yamato's guns is clearly visible here. Note that the deck was actually painted black for her final mission. Had the anti-aircraft crews been properly trained, and had the ineffective .25 mm AA machine guns been replaced with something similar to the USN's .40 cal twin barrel Bofors guns, the Yamato would have been able to inflict much more damage to the USN air arm during her final hours. As it was, the massive gun arrangement looked impressive on paper, but proved to be wanting in battle.

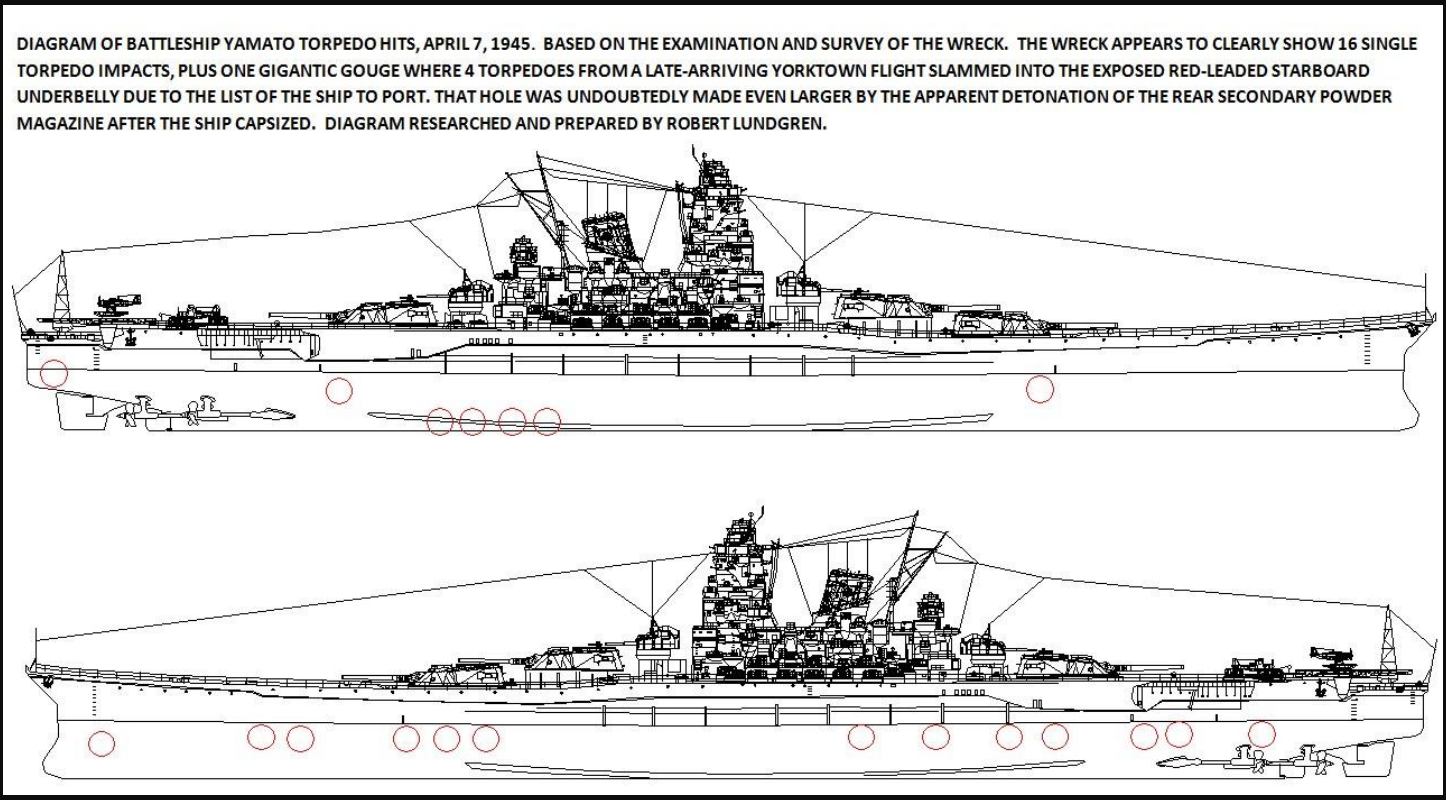


DIAGRAM OF BATTLESHIP YAMATO TORPEDO HITS, APRIL 7, 1945. BASED ON THE EXAMINATION AND SURVEY OF THE WRECK. THE WRECK APPEARS TO CLEARLY SHOW 16 SINGLE TORPEDO IMPACTS, PLUS ONE GIGANTIC GOUGE WHERE 4 TORPEDOES FROM A LATE-ARRIVING YORKTOWN FLIGHT SLAMMED INTO THE EXPOSED RED-LEADED STARBOARD UNDERBELLY DUE TO THE LIST OF THE SHIP TO PORT. THAT HOLE WAS UNDOUBTEDLY MADE EVEN LARGER BY THE APPARENT DETONATION OF THE REAR SECONDARY POWDER MAGAZINE AFTER THE SHIP CAPSIZED. DIAGRAM RESEARCHED AND PREPARED BY ROBERT LUNDGREN.

303. Operation Ten-ichigo Yamato Torpedo Hit Diagram

Prepared for me by Robert Lundgren based on his research and evidence of damage from the survey of the wreck available at the Yamato Museum.

Examination of the wreck shows that the number of torpedoes that hit Yamato during her last battle may have reached the mind boggling total of 20, maybe even a few more.

This is based on physical evidence from the wreck and accounts of Yamato survivors and USN pilots. Note that up to 4 torpedo impacts were delivered by Lt Stetson's late arriving Yorktown flight, hitting her near-simultaneously below the armor belt (due to the ship's list to port), causing her to capsize less than 10 minutes later.

The exact number of torpedoes and bombs that hit the ship will never be known, but all the available evidence suggests that the total exceeded the ordnance that had sunk Musashi 6 months earlier.

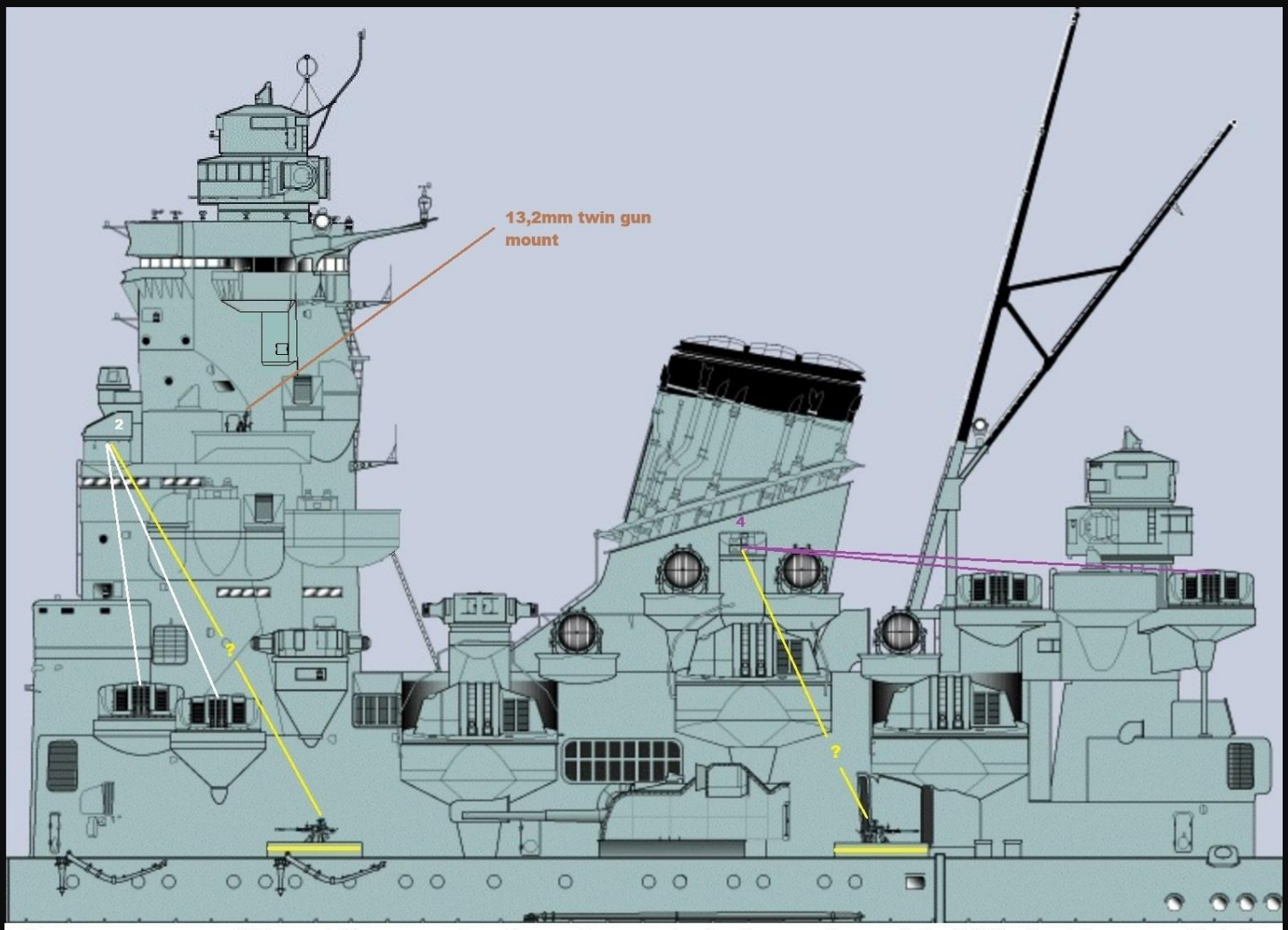
Thanks to Christian van der Sanden who recently (April 2024) sent me copies of the after-action diagrams from the Lt Stetson flight, which helped me to narrow the number of torpedo hits from that late flight from 6 to 4 probables, plus 2 “maybes” from the two planes at the rear which launched at diagonal angles due to Yamato’s hard turn to port.

Anthony Tully writes of this late Lt Stetson flight torpedo drop: *“There is reason to believe these final hits from VT-10 are not part of those cited in Yamato's action report, but came in addition to it after abandonment well in progress."*

304. Model of the Wreck of Battleship Yamato, Kure Maritime Museum, Kure Japan

Photos courtesy of Robert Lundgren. Anthony Tully informs me that a member of the Kure Yamato Museum wrote to him that the model was constructed with the best information and images they had in 1999. Recently it has been replaced with an elaborate CGI/AI holographic display.

305. Yamato's Shells
The green shell is an 18.1" high explosive shell; the white shell is an 18.1" armor piercing shell.
Each shell is about 6 feet, or about 2 meters, tall.



The appearance of Musashi´s superstructure at commissioning on August 5, 1942. Just two month later she will get her first modification.

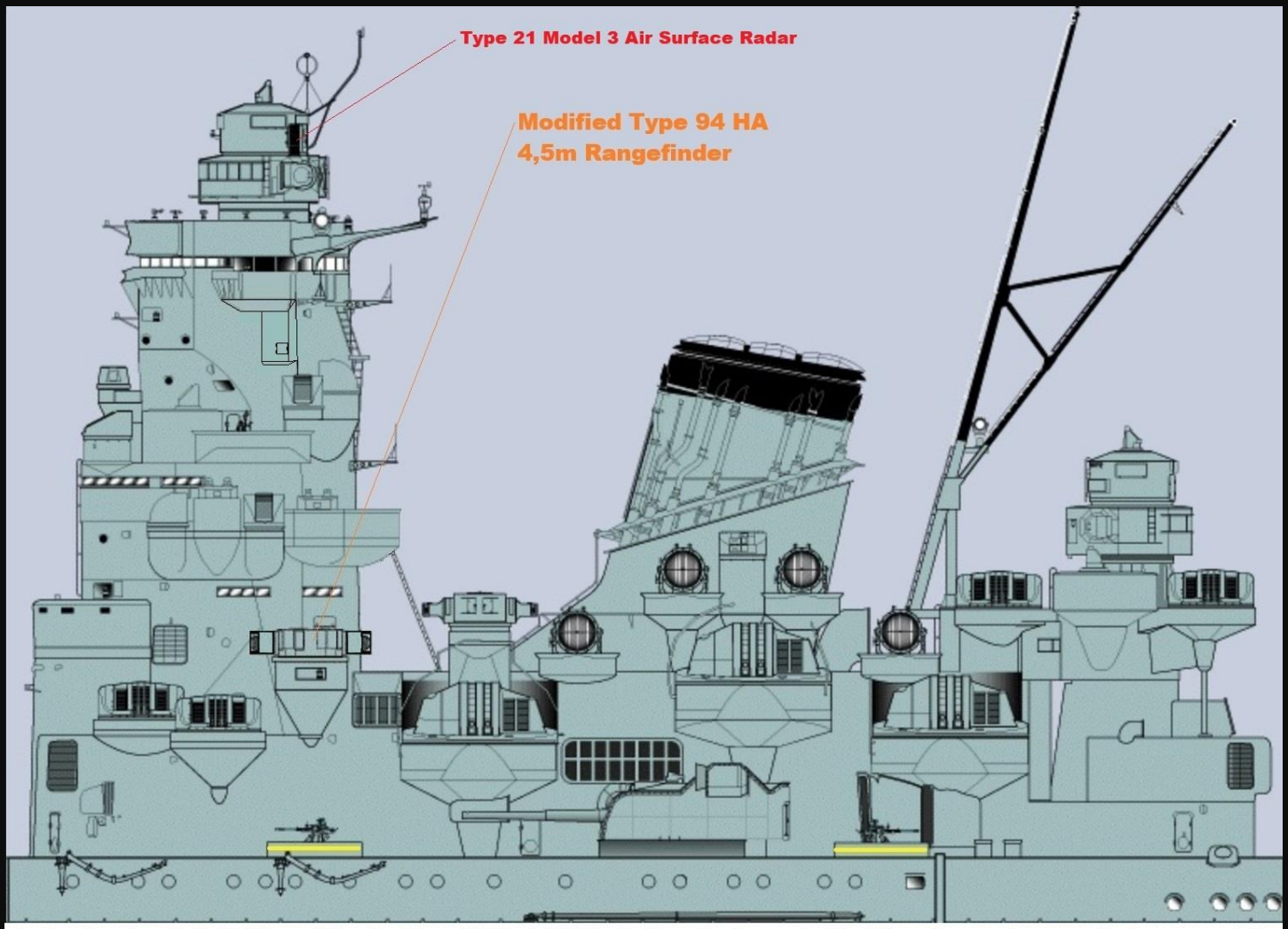
Her light AA guns armament at that time:

2x 13,2mm twin mounts (one on each side of her main bridge)
12x 25mm triple mounts (four triple turrets (Type B) on each side of the superstructure and two open triple mounts on her weatherdeck forward and aft of her wing 15,5cm triple turrets)

They were divided into four machine gun groups (No. 2 and 4 on the port side and No. 1 and 3 on her starboard side).

It is still unknown if the four open 25mm triple gun mounts on the weatherdeck were intigrated in the machine gun groups.

306. Musashi Superstructure August 2 1942 - at Commissioning
Diagram and Text prepared by Christian van der Sanden in 2025.



On September 3, 1942 Musashi got a Type 21 Model 3 Air Surface Radar on both of her 15m main rangefinder arms at the Kure Naval Base.

Between that day and November 14, 1942 Musashi got a modification on her two Type 94 HA 4,5m rangefinder at Kure Naval Base too. Probably only the rangefinder arms were modified. The exact date is unknown, but photos of Musashi in January 1943 are showing the modified Type 94 HA rangefinder.

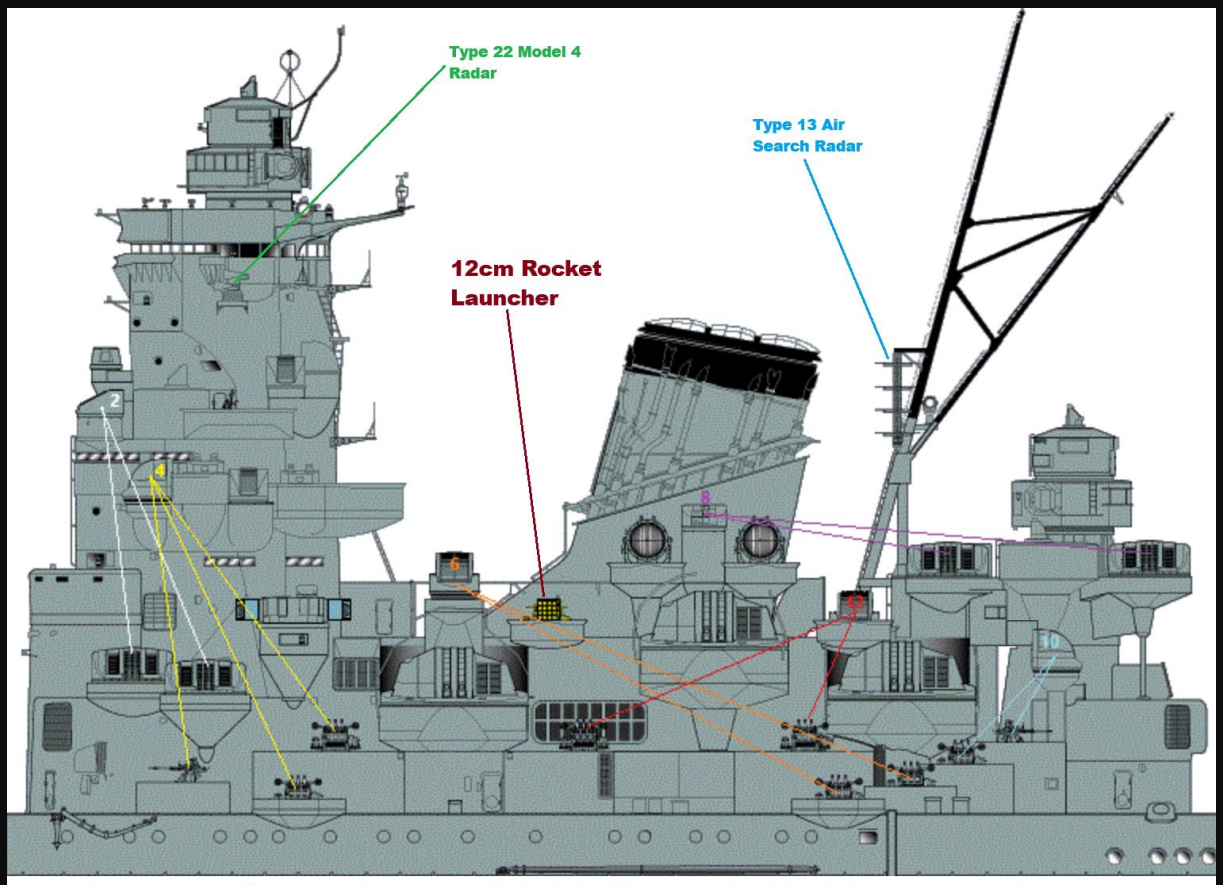
This configuration wasn´t changed until her Big Refit in April 1944.

307. Musashi Superstructure as of Sep 3 1942 Radar Installation

Christian van der Sanden sent me the following information about this diagram:

"Musashi's commissioning was on August 5th 1942. The four open 25mm triple Mounts were installed between June 27th and July 23rd 1942. So this is the first configuration with the open triple mounts!"

Diagram and Text prepared by Christian van der Sanden in 2025.



During her Big Refit between April 10 and 27, 1944, Musashi should got the same modifications as Yamato. But because of some shortages Musashi got a different refit than Yamato.

The new radar installations, radar room, crew standby rooms and supports for the new heavy and light AA guns were exactly the same as on Yamato.

But the first big shortage was the abscene of six new 12,7cm HA twin gun mounts. The new High Angle Gun Deck was finished and it was decided to install 25mm triple gun mounts at the planed positions of the missing new 12,7cm HA twin gun mounts.

The turrets for the new to install 25mm triple gun mounts weren´t completed too. The result was that all new 25mm triple gun mounts didn´t have turrets like the Yamato after her refit.

The only 25mm triple gun turrets until her sinking were the original eight type B turrets.
Some of the new open 25mm triple gun mounts got some simple protection shields for the pointer and gunner. Other triple and single mounts were simple protected by hammocks or ricebags (filled with sand or soil).

The 25mm machine gun groups were increased from four to fourten groups. This number is confirmed by a survivor who was stationed at the 13th machine gun group at the catapultdeck of the Musashi. Ten modified Type 95 Machine Gun Control Tower were installed and used for the new machine gun groups.

After this refit Musashi had 30x 25mm triple gun mounts (Eight in type B turrets and twenty-two in open mounts) and 25x 25mm single guns.

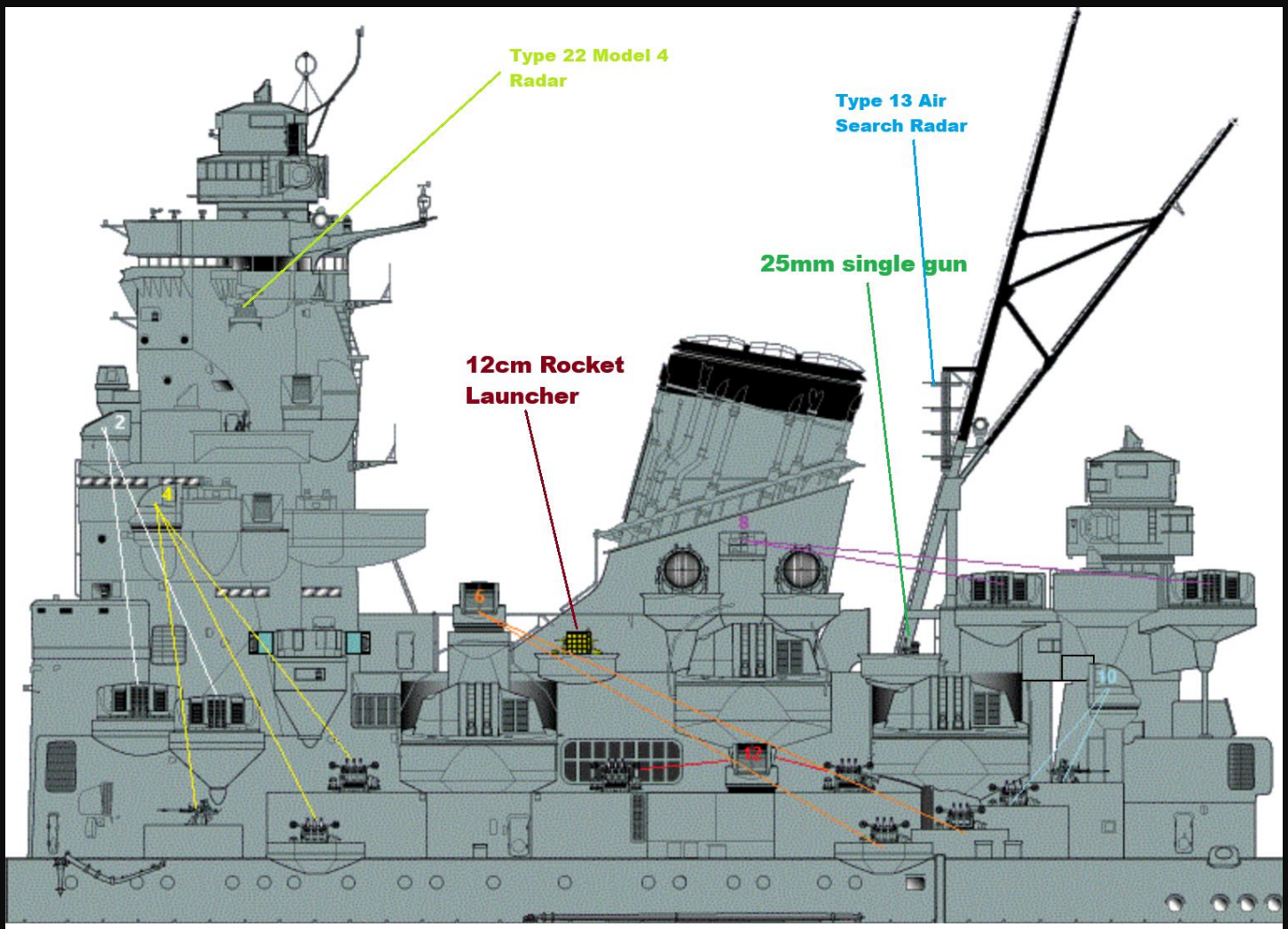
Between July 2 and 8, 1944 Musashi got 5 additional 25mm triple gun mounts around the forward and aft 15,5cm triple gun turrets. These mounts were NOT intigrated into machine gun groups.

Musashi´s final AA armament was:

12x 12,7cm HA guns in six twin turrets
130x 25mm machine guns (30x triple mounts and 25 single mounts)
2x 28 Tubes 12cm Rocket Launchers
4x 13,2mm machine guns in two twin mounts.

308. Musashi Superstructure dring Refit in April 1944 – Version A

Diagram and Text prepared by Christian van der Sanden in 2025.



It is still unsolved where the Machine Gun Control Towers No. 11 and 12 (even numbers on the port side and uneven numbers on the starboard side) were installed. Two positions are possible. Here you can see the control tower no. 12 installed on the new High Angle Gun Deck. On the other drawing you can see that the Control Tower no. 12 is installed at the position of the removed 150cm searchlight No. 8 (above the HA 12,7cm twin turret no. 6).

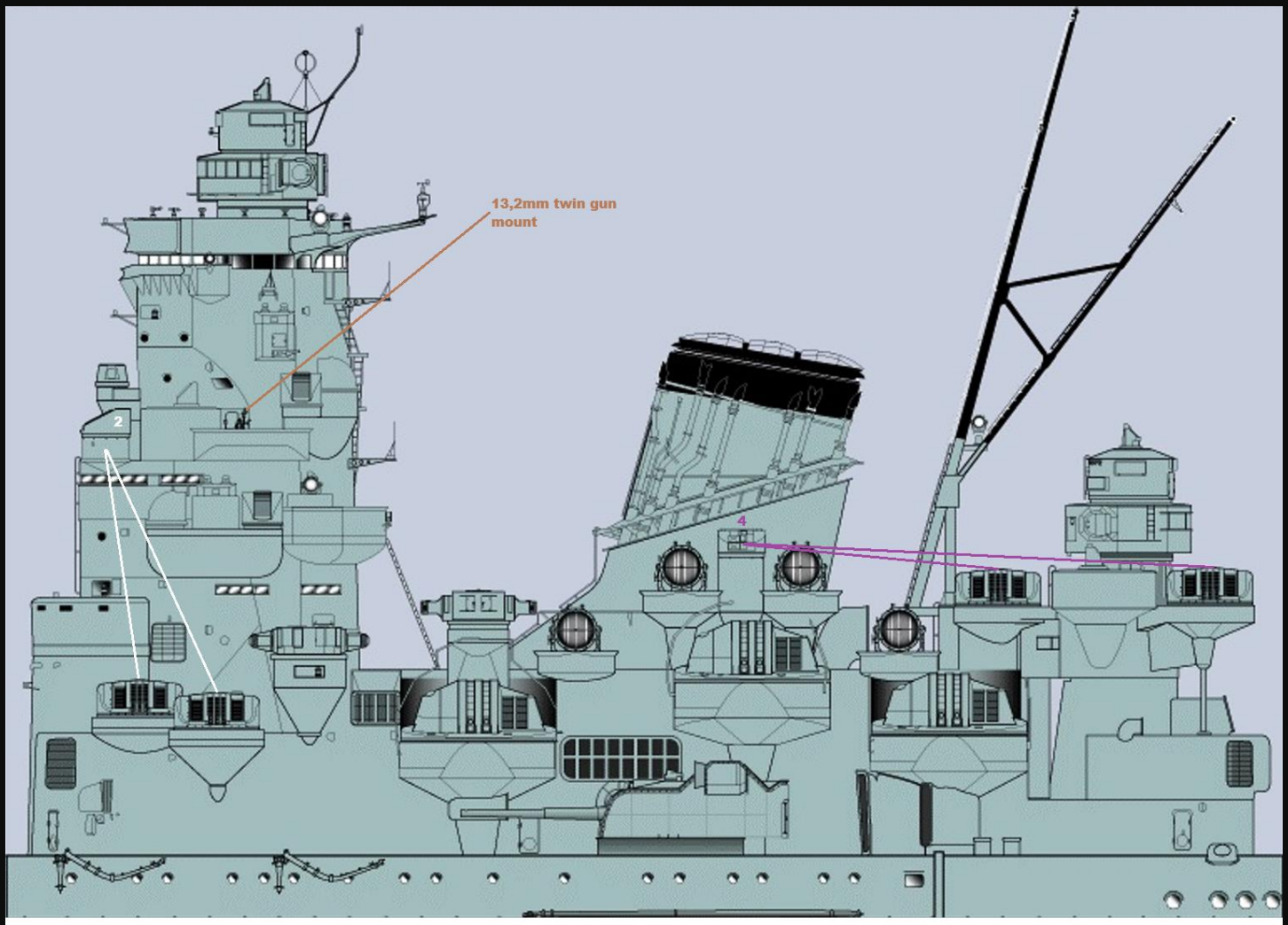
The two 12cm rocket launcher at the positions of the removed 150cm searchlights No. 1 and 2 were most likely installed between July 2 - 8, 1944.

After a test shooting at or near Kure, the rocket launchers were never used again, because no crew was assigned to them.

In case of the Machine Gun Control Towers No. 3 and 4; these were the only machine gun groups with three 25mm triple mounts instead of the regular two 25mm triple mounts per control tower/group. (confirmed by Chief Petty Officer Fumio Makinae. Who was leader of the 3rd machine gun group on the Musashi)

309. Musashi Superstructure dring Refit in April 1944 – Version B
Diagram and Text prepared by Christian van der Sanden in 2025.

Note: The AA rocket launchers were a new for the IJN. They would fire a rocket barrage in the direction of approaching planes. The two launchers on Musashi were not yet operational at the time of the Battle of Leyte Gulf, but had been mounted and tested prior to the operation as a 'morale boost' for the ship's crew. AA rocket launchers may have been used at Leyte by one of the IJN's aircraft carriers, but if so, weren't effective due to problems with accurate targeting.



Yamato´s superstructure from commissioning on December 16, 1941 until July 12, 1943.

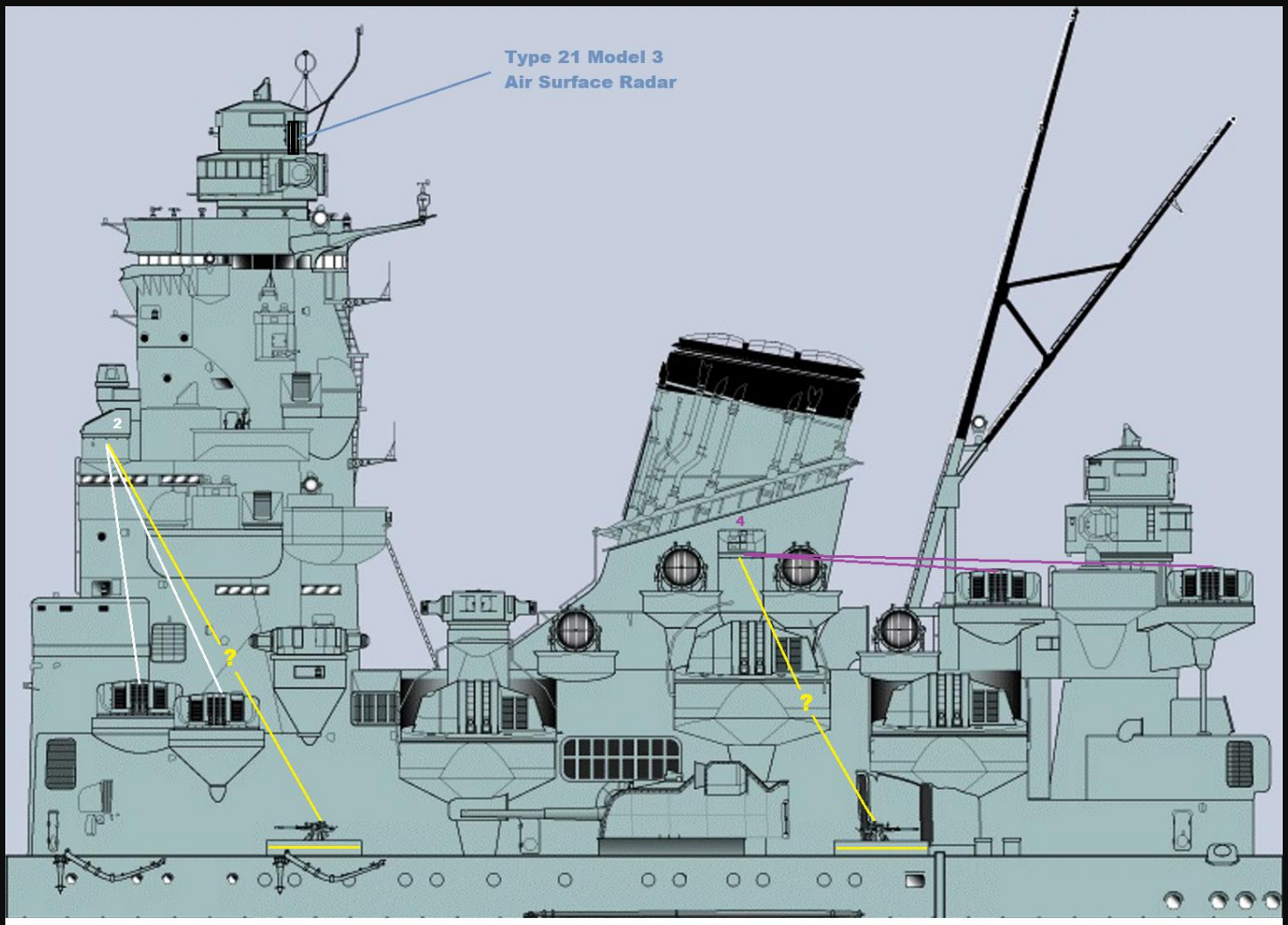
Her initial light AA guns armament at that time:

2x 13,2mm twin gun mounts (one on each side of her main bridge)
8x 25mm triple gun mounts in eight Type A turrets (four on each side of the superstructure).

They were divided into four machine gun groups (No. 2 and 4 on the port side and No. 1 and 3 on her starboard side).

310. Yamato Superstructure 1941

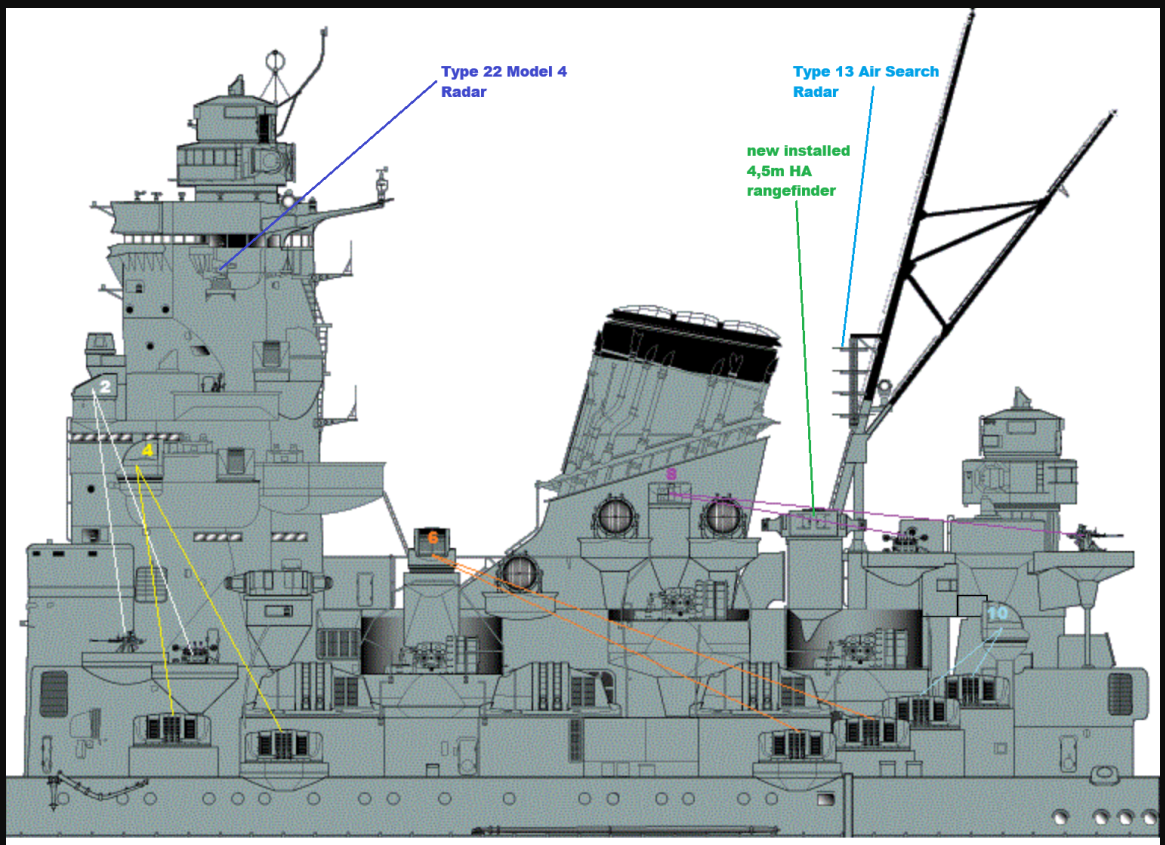
Diagram and Text prepared by Christian van der Sanden in 2025.



Yamato´s first modification was between July 12 and 16, 1943. She got the Type 21 Model 3 Air Surface Radar on both arms of her 15m main rangefinder and four new open 25mm triple mounts on her weatherdeck forward and aft of her two 15,5cm secondary wing triple turrets. It is still unsolved if these 25mm triple mounts were integrated into the four machine gun groups of Yamato.

311. Yamato Superstructure 1942

Diagram and Text prepared by Christian van der Sanden in 2025.



The Kure Navy Arsenal Shipbuilding Department finalized Outfitting Plans on February 7, 1944 for the Big Refits of Yamato and Musashi.

Yamato was the first ship and got her big refit from February 25 to March 18, 1944.
Main reason for this refit was the air superiority of the U.S. Navy.

Her two heavy AA batteries (one on each side of the superstructure) were doubled into four batteries by installing three new 12,7cm HA twin gun mounts on each side of her newly installed High Angle Gun Decks. The 150cm searchlights No. 7 and 8 were removed and two more 4,5m HA rangefinder were installed on these positions for the two new heavy AA batteries.

In case of the 25mm machine gun groups, they were increased from four groups to twelve.
Six of the new machine gun groups were installed on both sides around the new high angle gun decks.

The three new machine gun groups No. 4, 6 and 10 are visible on the above port side drawing (new machine gun groups No. 3, 5 and 9 were installed on the starboard side).

Two more machine gun groups (No. 11 and 12) were installed on the catapultdeck.

Eight of the modified Type 95 Machine Gun Control Tower were used for the new machine gun groups.

After the refit Yamato had 24x 25mm triple gun mounts (in eight type A turrets, eight type B turrets and eight open mounts) and 26x 25mm single guns.

Between July 2 and 8, 1944, Yamato got additional five open 25mm triple mounts around the forward and aft 15,5cm triple gun turrets. These mounts were NOT integrated into machine gun groups.

Yamato´s AA armament at the Battle of Leyte was:

24x 12,7cm HA guns in twelve twin mounts
113x 25mm machine guns (29x triple mounts and 26 single mounts)
4x 13,2mm machine guns in two twin mounts.

(The type A turrets of the original eight 25mm triple mounts were removed during the big refit to lower more exposed positions in case of the blast of the 46cm main guns)

312. Yamato Superstructure Feb-March 1944 Outfitting – Part A

Diagram and Text prepared by Christian van der Sanden in 2025.

During her big refit Yamato got six additional 12,7cm HA twin gun mounts and two more 4,5m HA rangefinder.

So the number of heavy AA batteries increased to four.

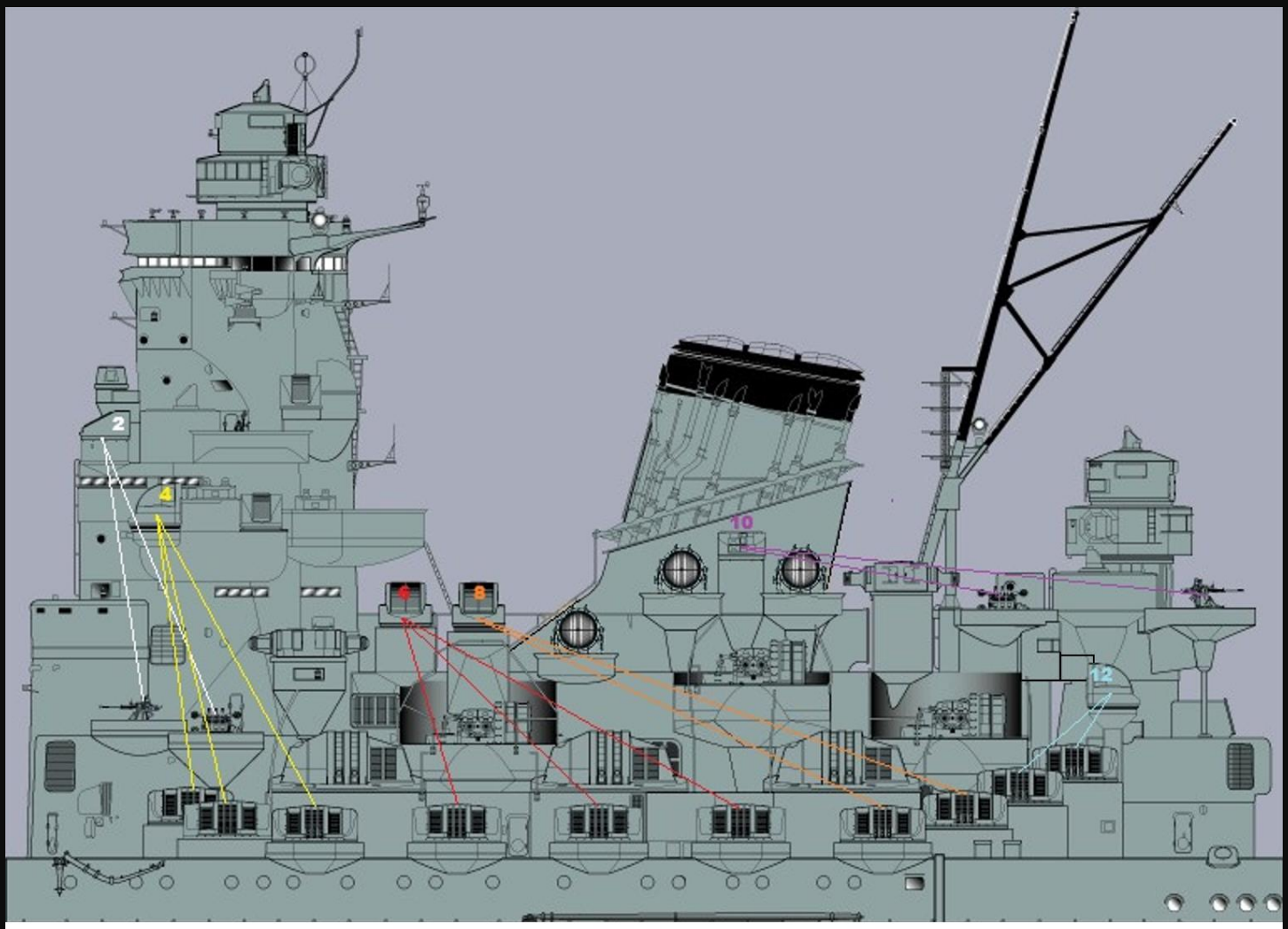
On the port side were the battery No. 2 which could control the 12,7cm twin mounts no. 2, 4 and 8, and the battery No. 4 could control the 12,7cm twin mounts no. 6, 10 and 12.

"Could" means, that each 12,7cm twin gun mount had the possibility to operate independently too.

(This is the result of my own research on original photos of Yamato from October 26, 1944)

313. Yamato Superstructure Feb-March 1944 Outfitting – Part B

Diagram and Text prepared by Christian van der Sanden in 2025.



Yamato got a battle damage (from Leyte) repair and a final increasing of her 25mm machine guns between November 25 and December 23, 1944.

Her final 25mm gun armament was:

24x 25mm triple turrets (eight type A, eight type B and eight simplified type C)
28x 25mm open triple mounts
4-6x 25mm single guns

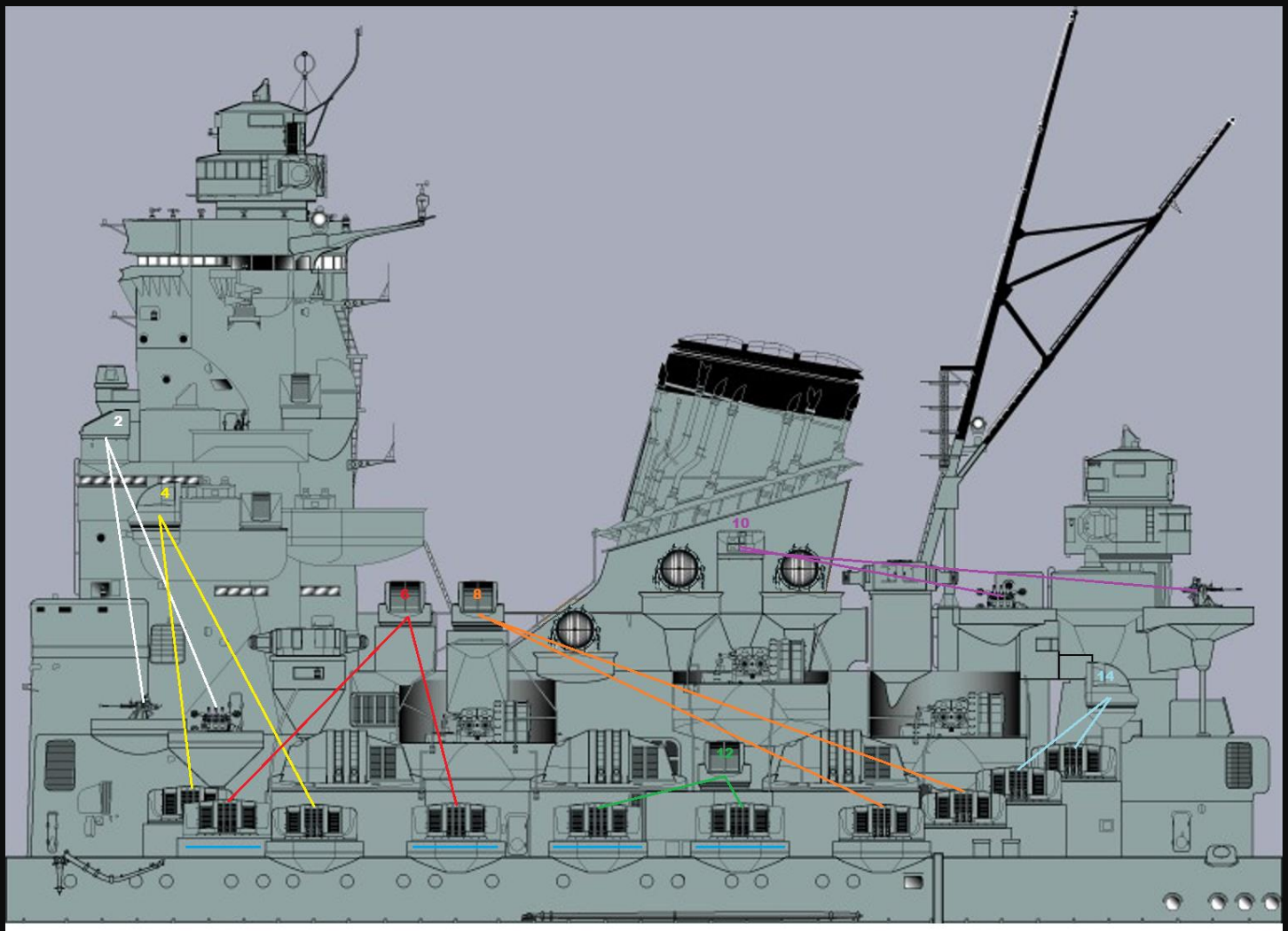
On and around Yamato´s superstructure were 28x 25mm triple mounts (in twenty turrets and eight open mounts).

There are still two theories about the exact number of machine gun groups!

On the above drawing you can see that the control towers No. 4 and 6 (No. 5 and 7 on the starboard side) have controlled three 25mm triple mounts instead of the usual two 25mm triple mounts per machine gun group.

In this case Yamato had a total of 14 machine gun groups.

314. Yamato Superstructure & AA Fire Control Directors April 1945 – Version A
Diagram and Text prepared by Christian van der Sanden in 2025.



This is the second theory related to the machine gun groups of Yamato´s superstructure. The control tower No. 12 (No. 11 on the starboard side) is on the same position as on one of Musashi´s last machine gun groups theories.

The disadvantage of this position for the control tower would be a limited targeting angle, because of the two 12,7cm HA twin turrets next to the control tower.

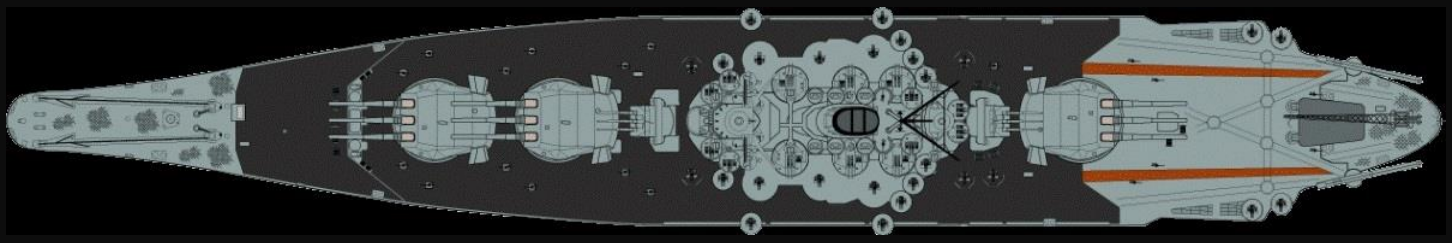
If this theory is correct the Yamato had 16 machine gun groups on her final machine gun configuration.

Please notice the four blue marked 25mm triple turrets. These are the simplified (im terms of construction) type C turrets, with less round shapes and edges than the types A and B.

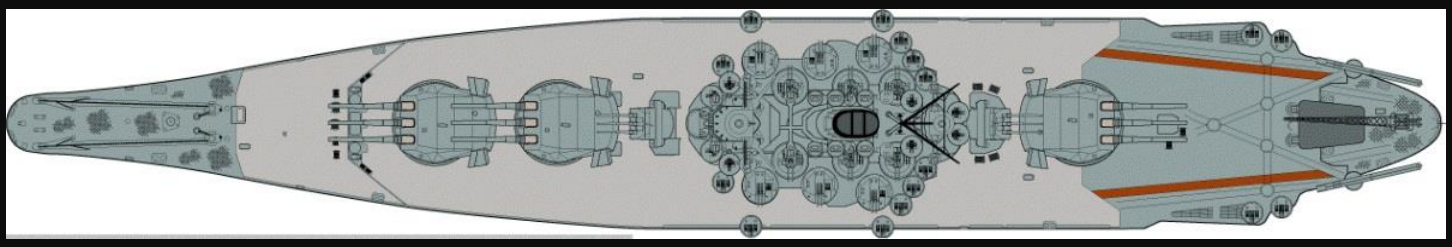
The type C turrets were installed during the last refit in November/December 1944.

315. Yamato Superstructure & AA Fire Control Directors April 1945 – Version B

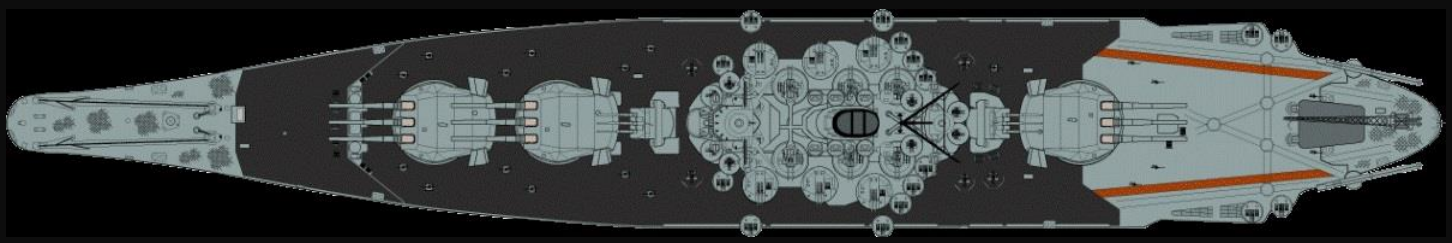
Diagram and Text prepared by Christian van der Sanden in 2025.



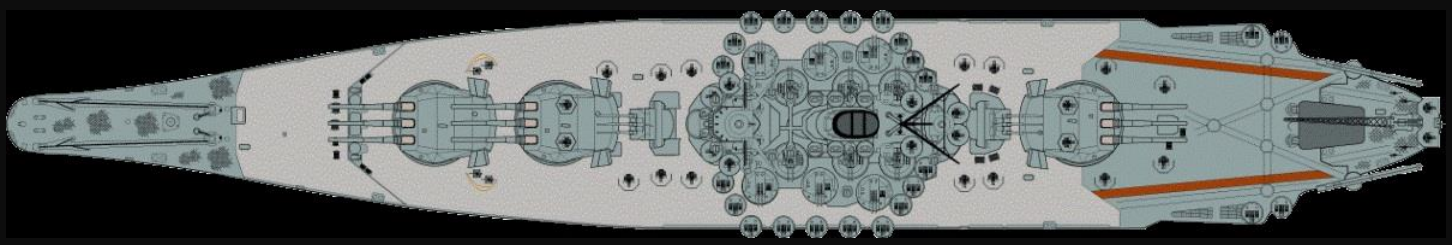
316. Musashi Deck Configuration at time of Leyte Gulf (1944)
Note: there is one omission on this diagram that was discussed in the Leyte Gulf Musashi Superstructure diagram. Namely, prior to Leyte the lower front search lights on both sides were replaced by 3 AA rocket launchers.



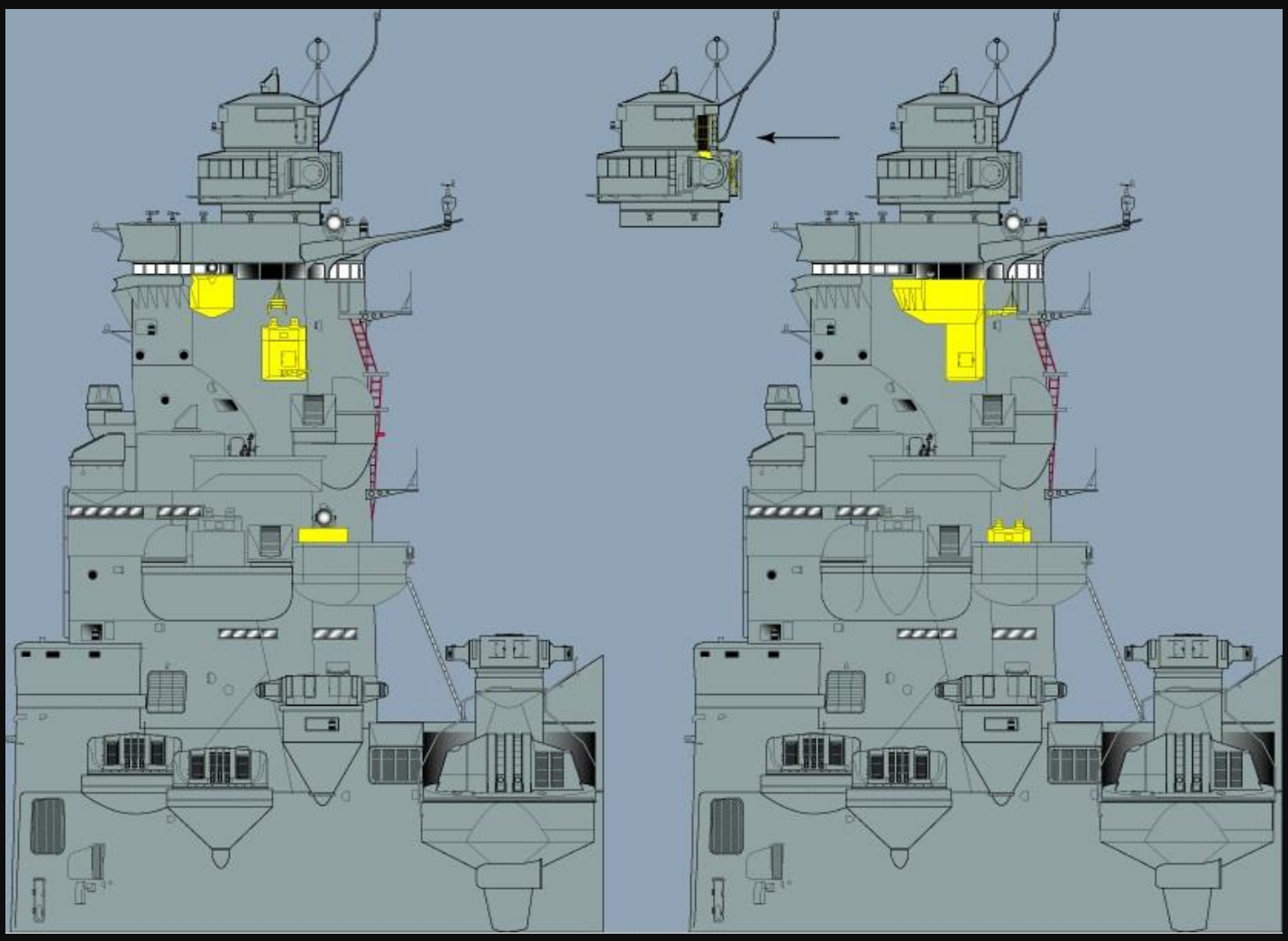
317. Yamato Deck Configuration between March 18 and July 2 1944
This is following removal of the midships 6" secondary turrets but before Leyte Gulf (see next graphic).
Thanks to Christian van der Sanden for providing additional information about this photo.



318. Yamato Deck Configuration at Leyte Gulf 1944



319. Yamato Deck Configuration Ten Ichi Go 1945



320. Yamato Superstructure Changes Comparison

321. Yamato's Not-So-Excellent Christmas Day Adventure (1943)

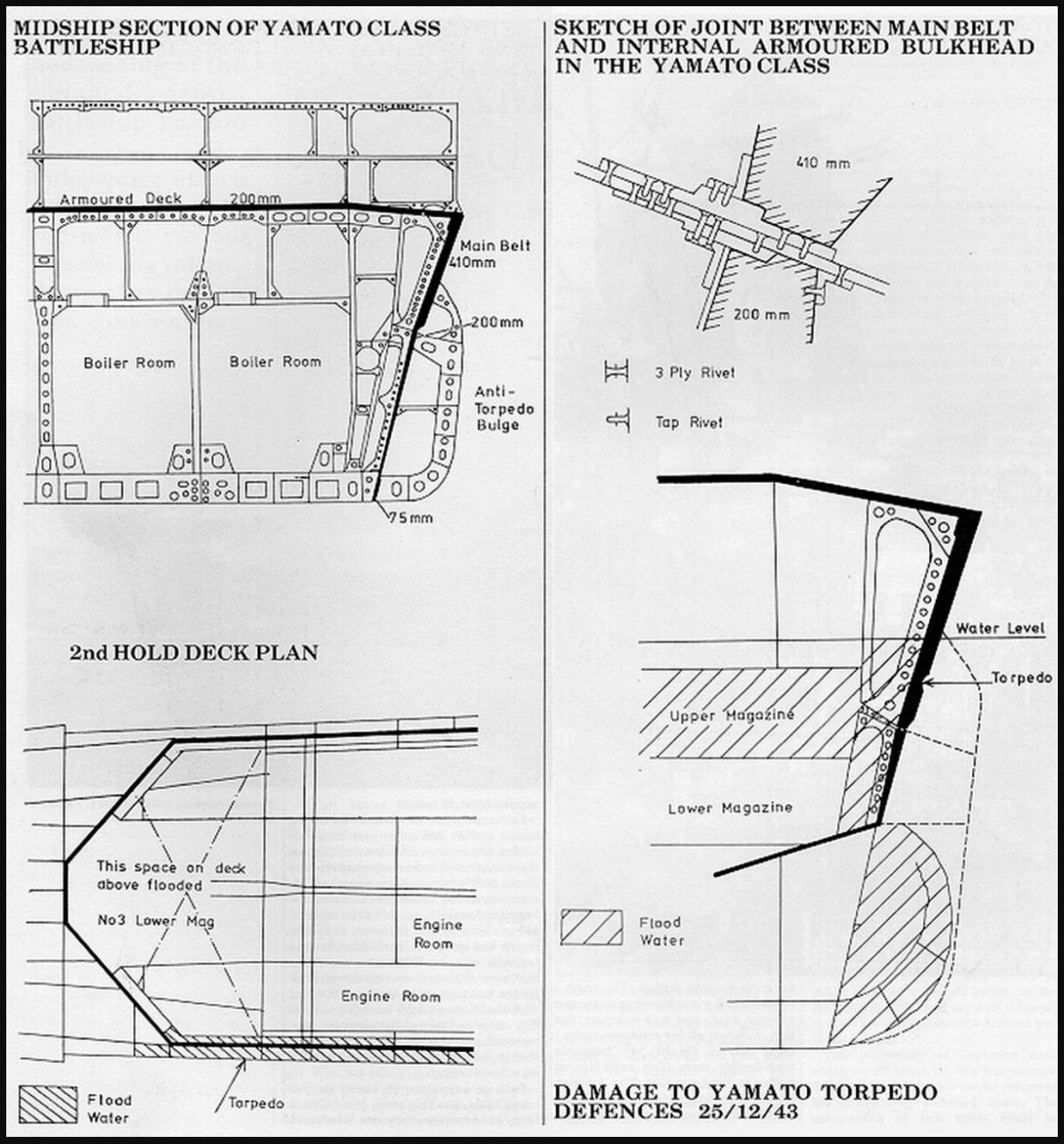
On Christmas Day, 1943, Yamato was being used to transport troops and supplies to Truk Island, coming all the way from Japan. Japan's merchant marine was already in a perilous state due to unyielding USN submarine and air attacks, and even the two great battleships were "thrown into the breach" to try to fill the widening gaps in Japan's ability to supply its far flung Pacific island outposts.

It was another in the long list of instances of misuse of Battleships Yamato and Musashi in the early years of the war, when their contribution – especially had Yamato taken part in the First Naval Battle of Guadalcanal – could have made a significant, if only temporary, positive difference to the IJN's war effort.

About 180 nautical miles from Truk, the submarine USS Skate became the first USN vessel to catch sight of the giant battleship, traveling at 19 knots with an escort of destroyers. She took aim at Yamato's starboard side and fired a spread of 4 "fish" at the gigantic looming target.

322. Yamato's Not-So-Excellent Christmas Day Adventure (1943) – The Submarine USS Skate

As USS Skate dove to hide from the inevitable destroyer depth charge counter attacks, her crew heard the distinctive sound of a single torpedo detonation. Yamato had been hit towards the rear of the "armored box" that protected the middle of the ship, just aft of the rear 18" turret #3.



323. Yamato's Not-So-Excellent Christmas Day Adventure (1943) – Diagram from Warship International 2008 courtesy of Anthony Tully

This single torpedo (or possibly two, detonating simultaneously – we will never know for sure, but this latter theory has been raised in recent years as a possibility) ran shallow, hitting Yamato only 4 feet below the waterline, where the damage should have been relatively manageable or minimal.

None the less, the ship quickly shipped 3000+ tons of water and developed a 2 to 3-degree list. The list was quickly corrected by counter-flooding one of the torpedo "blisters" (ie hollow bulkhead compartments) on the opposite side of the ship. Yamato completed her mission and was examined and repaired upon her return to Japan.

The findings shocked the IJN engineers. Though the shallow depth of the detonation lacked the force it would have had if the torpedo had hit 15 feet lower down, where the much greater volume of surrounding water would have had a

“multiplier effect” on the forces exerted against the hull, the torpedo had still breached Yamato’s armor defenses, creating a hole in the hull that allowed the flooding to occur.

A significant factor, unknown to the IJN at the time, was the fact that the USN had switched to arming its torpedo heads from TNT to the new, twice as powerful, Torpex explosive.

The torpedo explosion not only penetrated the “torpedo blister” that was designed to take most of the force of the detonation, but tore a hole in the ship’s bulkhead, despite the armor belt being much thicker and stronger at that shallow depth than it was farther down, due to compromises that had to be made during her design to keep the weight of the ship from becoming too great (see the above diagram).

While no amount of armor could counteract impacts from a score of torpedoes (as was demonstrated by the results of the titanic amount of punishment dished out by the USN during the final battles of Musashi and Yamato), the Yamato class armor belt design turned out to have some basic design flaws.

These ships had a thicker, lower bulkhead design. That bulkhead was joined to the armor belt using transverse joints that turned out to be of insufficient strength to withstand the shearing forces created by a torpedo detonation.

Yamato’s armor belt took the brunt of the explosion of Skate’s torpedo, however the transverse joint underneath sheared, indenting both sides into the ship by 1 meter and allowing flooding to pour in through that tear.

Had the torpedo impact been deeper, at 15-20 feet as was the common setting for attacks on capital ships, the greater force of the explosion in deeper water, combined with the decreasing thickness of the armor belt as it descended down the sides of the ship, would have caused much greater flooding.

In the end however, the only sure way to protect WW2 battleships from torpedo attack was to control the airspace above them with your own Combat Air Patrol (CAP), while also fielding a destroyer screen sufficient to protect from marauding submarines. After the catastrophe suffered by the IJN air arm at the Battle of Midway, the former option faded away and the USN’s air arm had increasing freedom to launch and land aerial attacks on Japanese warships – as well as on Japan’s merchant navy, which was quickly decimated.

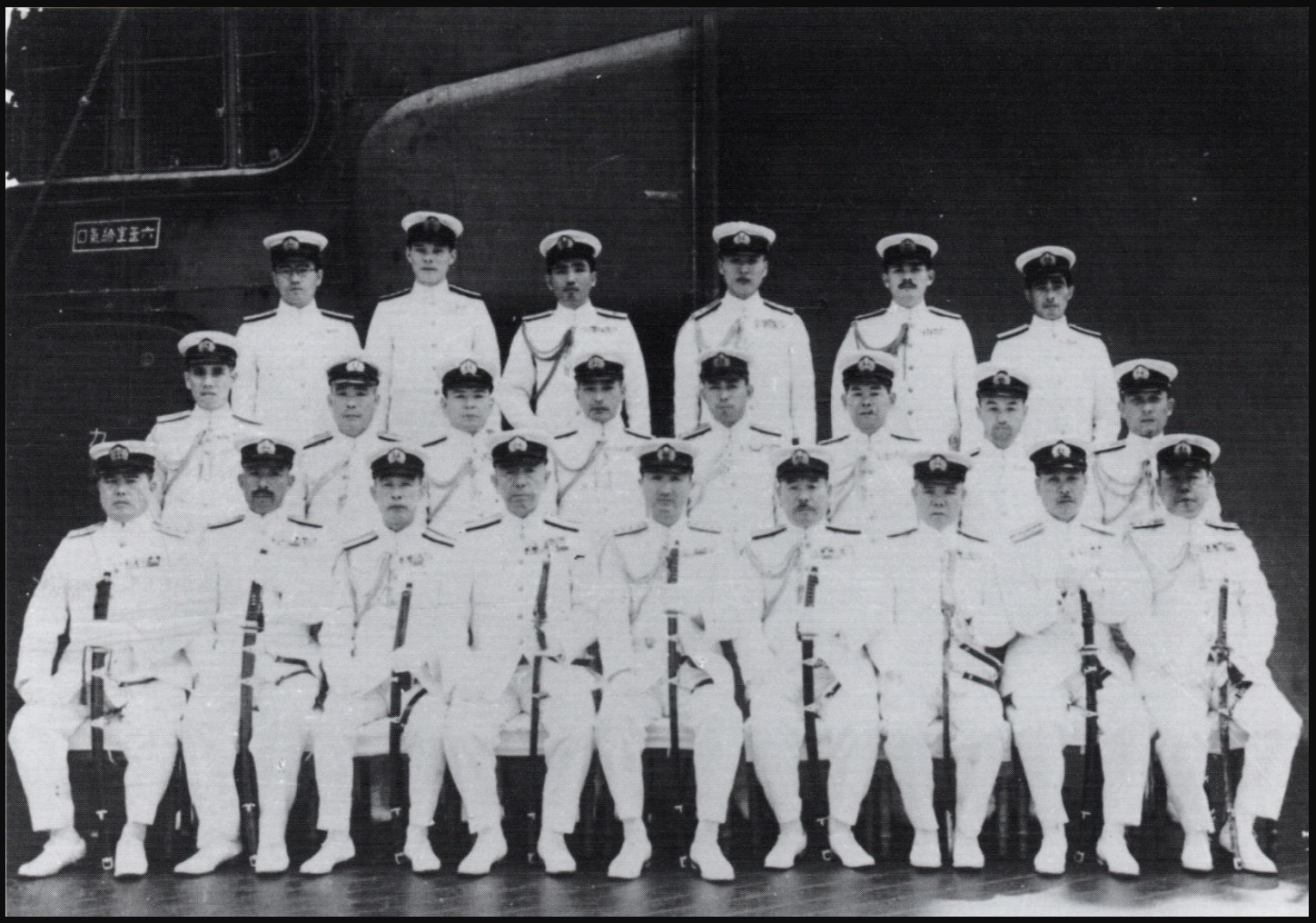
324. Accounting Officers of Yamato

This is a commemorative photo of the accounting officers aboard Yamato. Three of these young men were apparently onboard for the final mission. Photo Caption reads as follows:

“Work clothes can be seen in the far right. The living quarters were not equipped with dining facilities, but had wooden desks, clothing boxes (not equipped, but stored in clothing bags), clothing bag shelves for the same number of passengers, raincoats stored on top of the clothing bags, dining equipment box, raincoat shelves (stored in clothing bags), blackboard, shoe rack (for two shoes per person), berths, and fixtures that were supposed to be made of metal to prevent fires.”

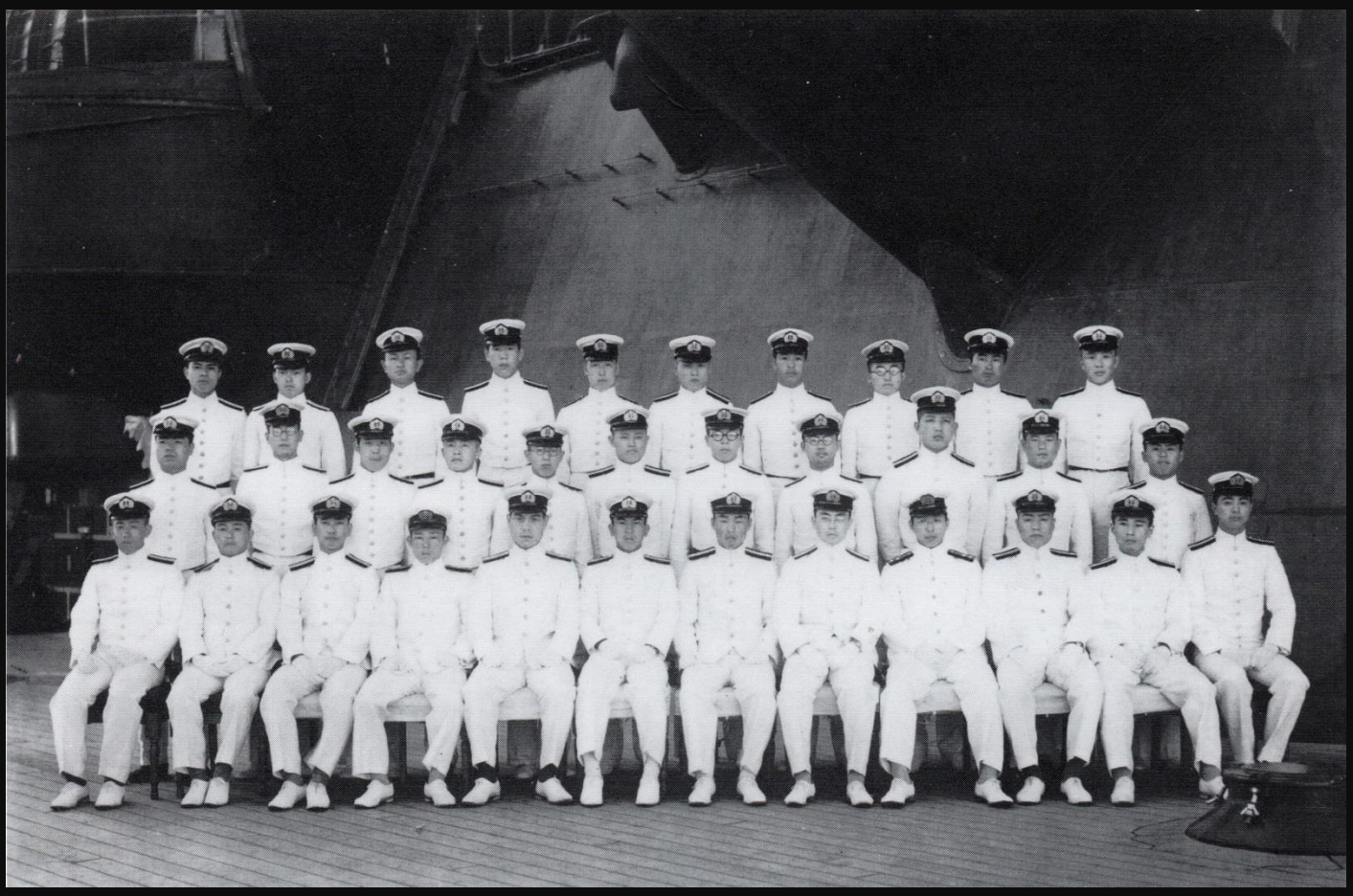
A 2024 Japanese TV historical program on Yamato was based around this photo, describing it as follows:

"A photo taken on the battleship Yamato has been found. In the dimly lit interior of the ship, 13 crew members are smiling. Yamato was the top secret of the Japanese Navy, and many of its documents have been disposed of, making photos of the inside of the ship extremely rare. The photo was left behind by one of the crew members, who had sealed it away with the words "not to be shared with anyone outside." After further analysis, it was found that the photo was taken in the kitchen. It was an unofficial snapshot, and it was revealed that three of the crew members were with Yamato at the end."



325. COMBINED FLEET HEADQUARTER ON BOARD THE MUSASHI WITH ADMIRAL MINEICHI KOGA SPRING 1943.
Photo courtesy of Christian van der Sanden.

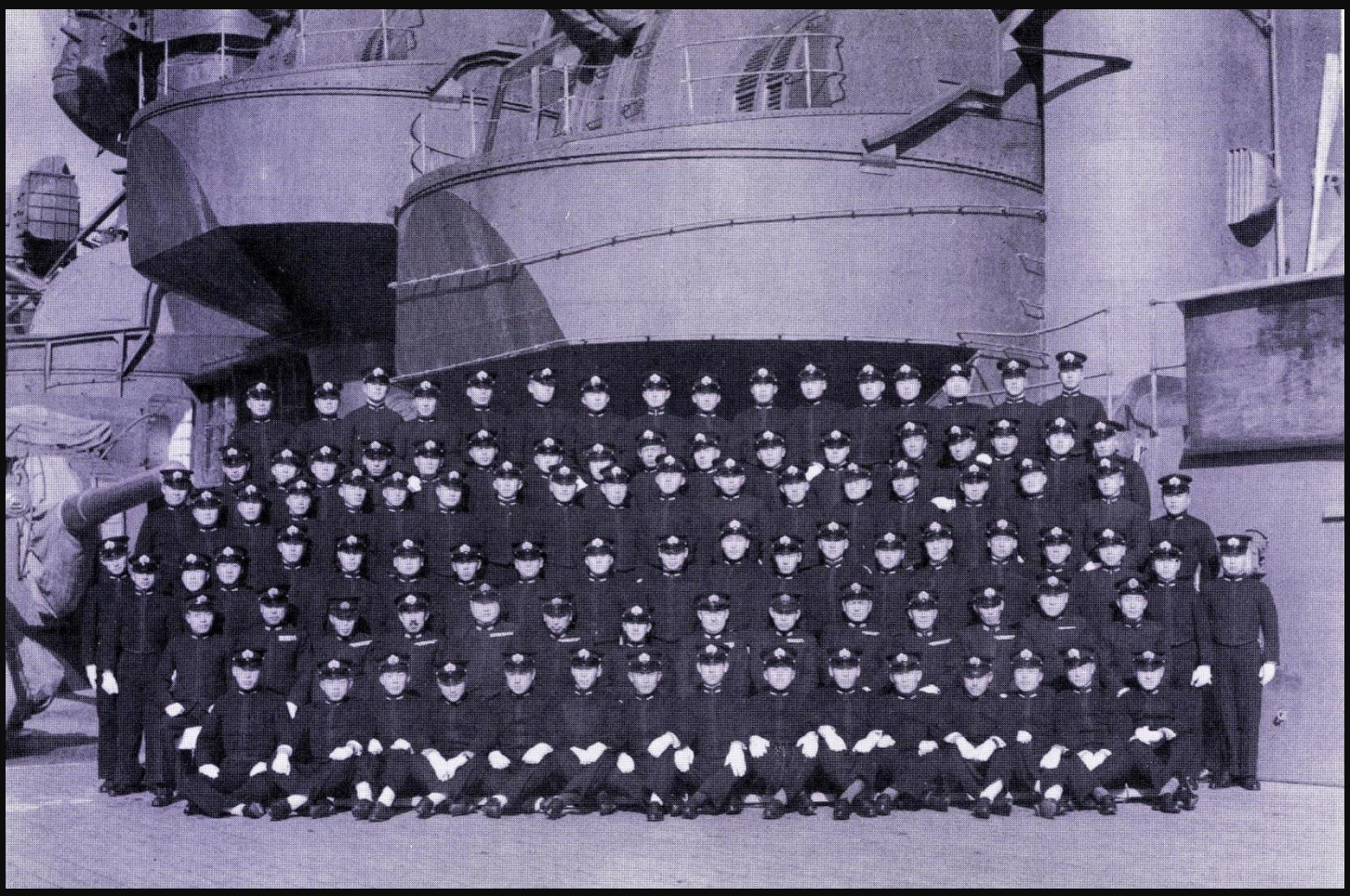
326. COMBINED FLEET SENIOR STAFF ON BOARD MUSASHI AT TRUK 1943.
Photo courtesy of Christian van der Sanden.



327. PHOTO TAKEN ON OCCASION OF MUSASHI BECOMING THE NEW FLAGSHIP OF THE IJN, AT TRUK 11.02.1943.
Commemmorative photo of Musashi Gunnery Officers. Photo courtesy of Christian van der Sanden.

328. MUSASHI COMMUNICATIONS CREWMEMBERS, DATE UNKNOWN.
Photo courtesy of Christian van der Sanden.

329. MUSASHI LIEUTENANT CADETS ABOARD SHIP, JANUARY 1943.
Photo courtesy of Christian van der Sanden.



330. COMMEMMORATIVE PHOTO OF JUNIOR OFFICERS OF MUSASHI, POSSIBLY JANUARY 1943

This photo came from the family of Musashi's gunnerry officer Tameshige Nagahashi. They also provided his photo of Musashi firing her main #3 turret during trials to the Japanese media in 2015. That photo can be seen in the first section of this Archive.

331. MUSASHI OFFICERS OR CREW JANUARY 1944 TRUK.
Photo courtesy of Christian van der Sanden.

332. OFFICER ON MUSASHI'S BRIDGE

333. OFFICER ON MUSASHI'S BRIDGE

334. OFFICER ON MUSASHI'S BRIDGE

335. ADMIRAL ISOROKU YAMAMOTO ON YAMATO'S ANCHOR DECK, DATE UNKNOWN, PHOTO 1
Photo courtesy of Christian van der Sanden.

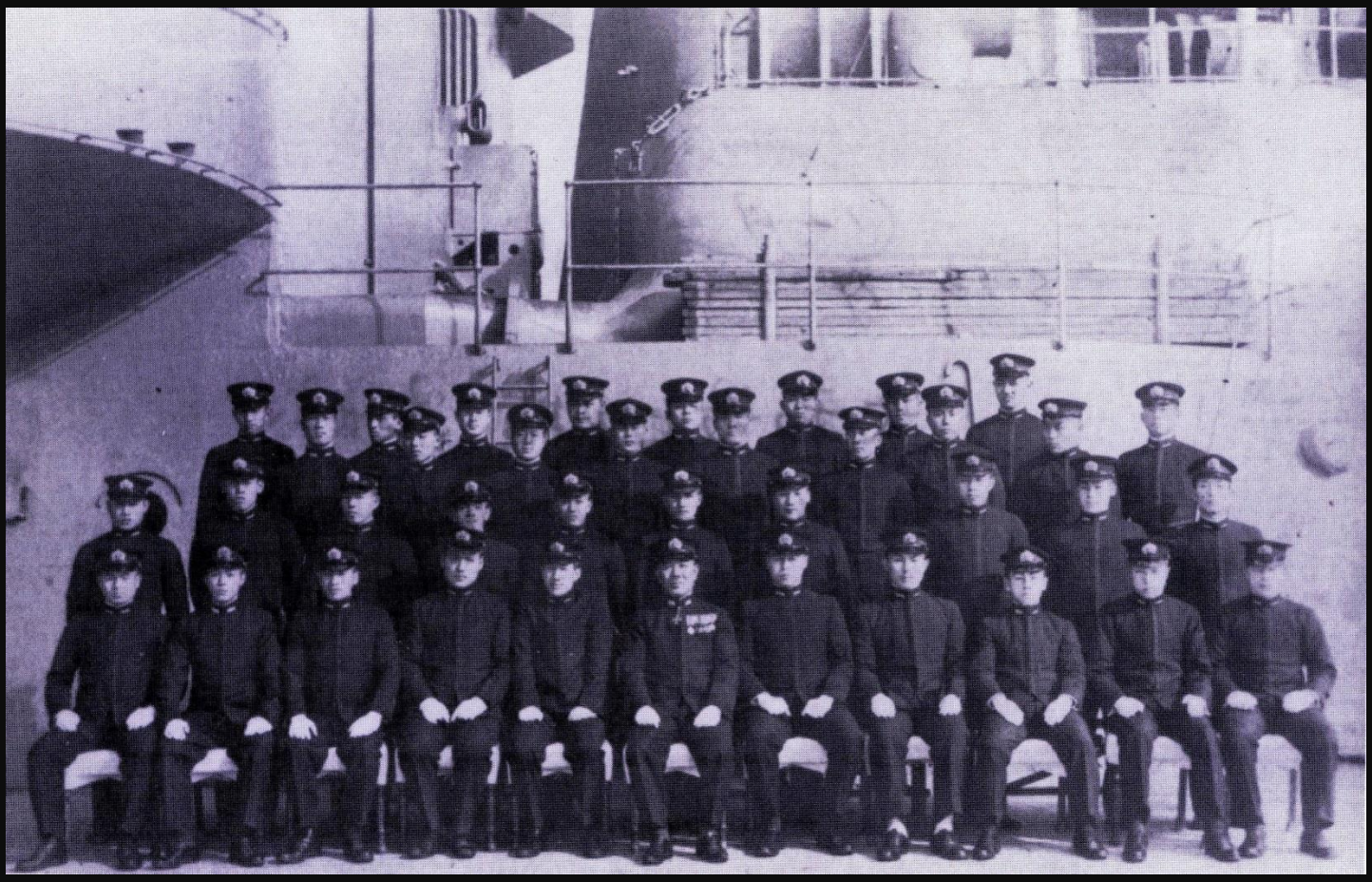
336. ADMIRAL ISOROKU YAMAMOTO ON YAMATO'S ANCHOR DECK, DATE UNKNOWN, PHOTO 2
Photo courtesy of Christian van der Sanden.

337. SAILOR ABOARD MUSASHI'S ANCHOR DECK, DATE UNKNOWN
Photo courtesy of Christian van der Sanden.

338. DEPUTY LT CDR YOSHIHITO SHIMIZU ON YAMATO'S STARBOARD DECK, EARLY 1945
Photo courtesy of Christian van der Sanden.

339. PLAYING A GAME OF RING TOSS ON YAMATO

On the port side of the stern crane deck. Thanks to Christian Van Der Sanden for providing the photo and deck location.

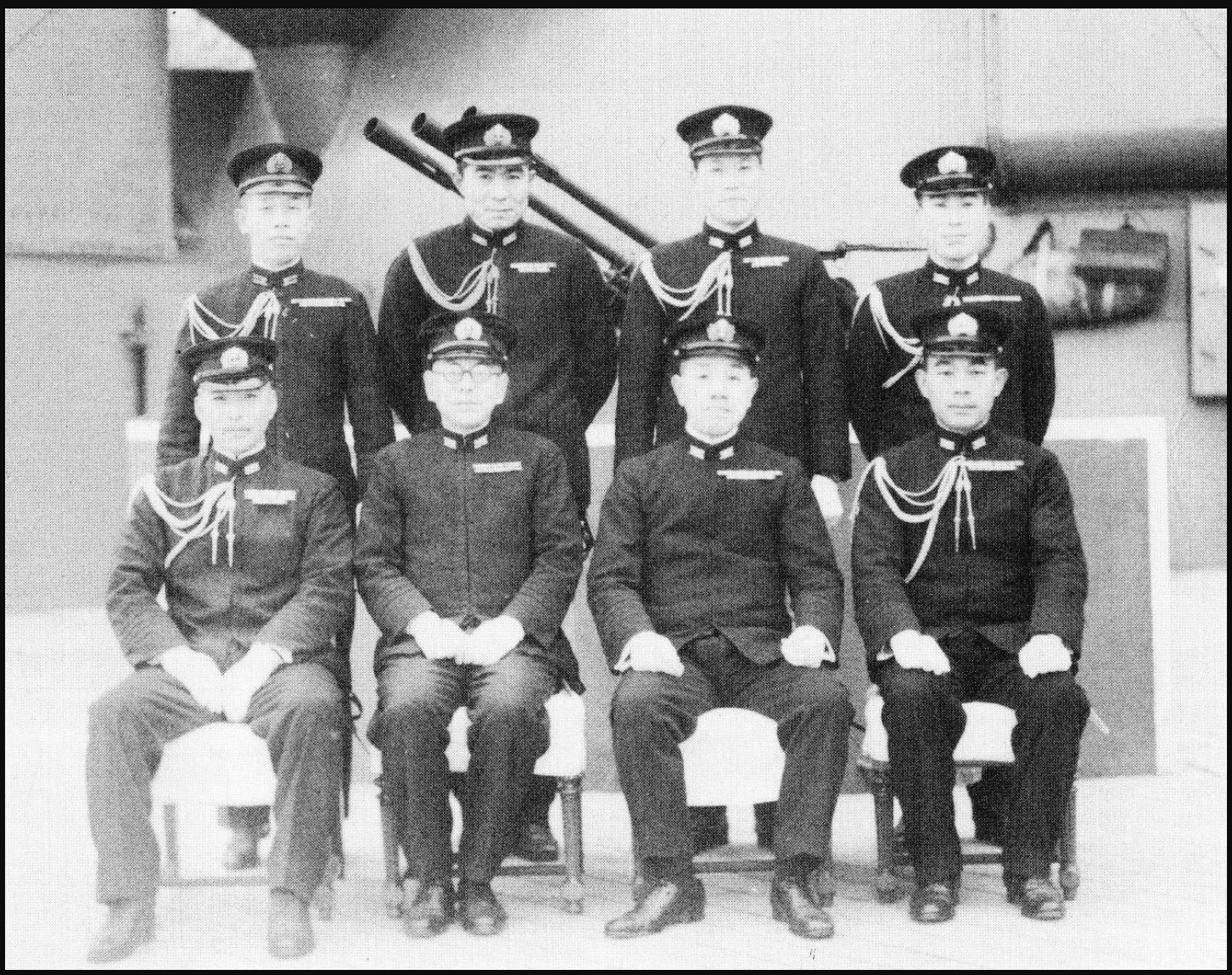


340 COMEMMORATIVE PHOTO OF GUNNERY OFFICERS OF YAMATO, DEC 1943

Taken on Yamato's top port side near the after bridge. Thanks to Christian Van Der Sanden for providing deck location.

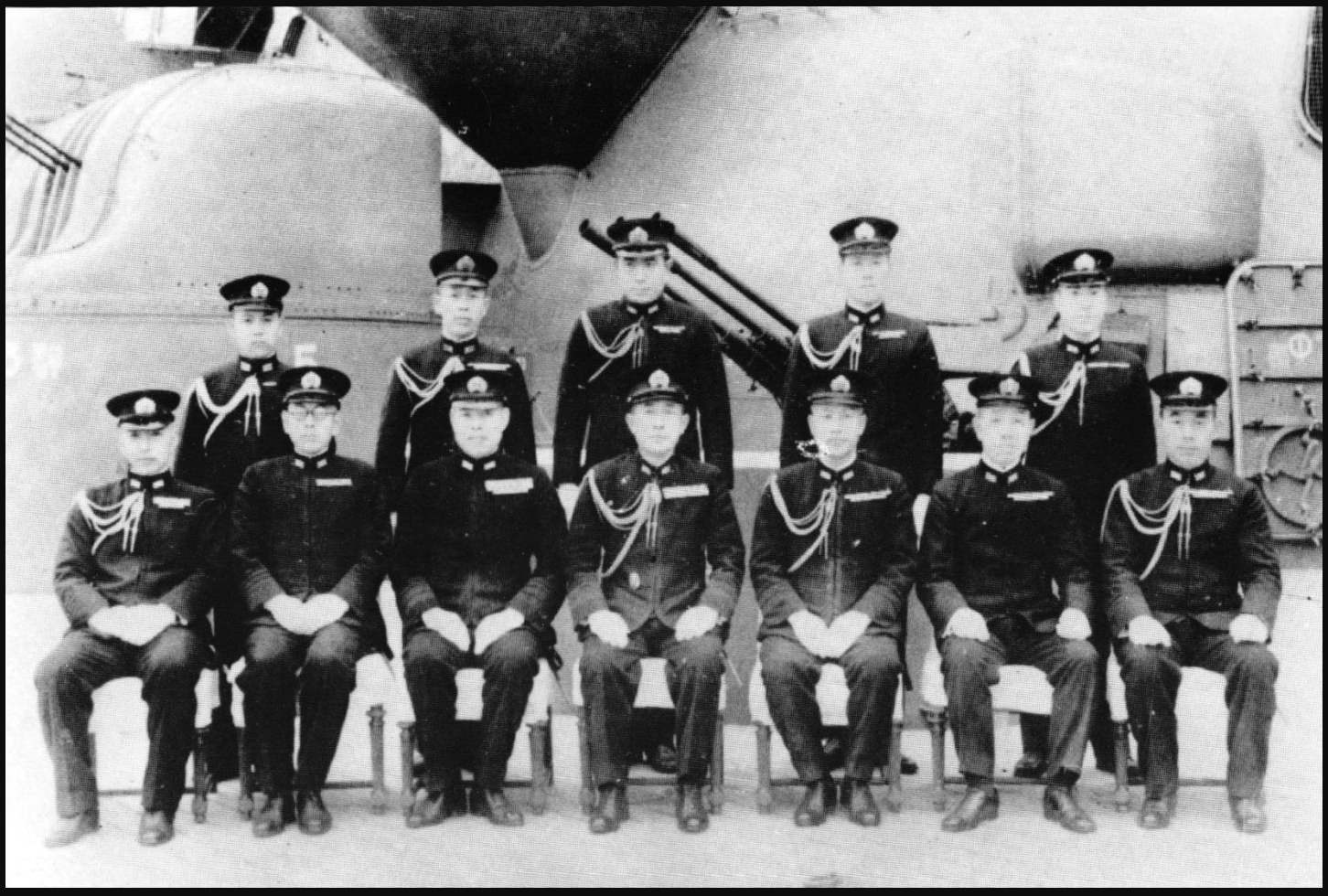
341. CREW MEMBERS PHOTO ON YAMATO – NOTE DEPUTY LT CDR YOSHIHITO SHIMIZU IS FRONT ROW FOURTH FROM RIGHT, JANUARY 1945

Photo courtesy of Christian van der Sanden.



342. SENIOR COMMAND STAFF ABOARD YAMATO, JAN OR APRIL 1945

Note the open mount 25mm AA gun behind the group. Also visible just behind the group is the splinter protection decagonal shield erected half way around the AA position, with the border edges painted white. Photo courtesy of Christian van der Sanden.



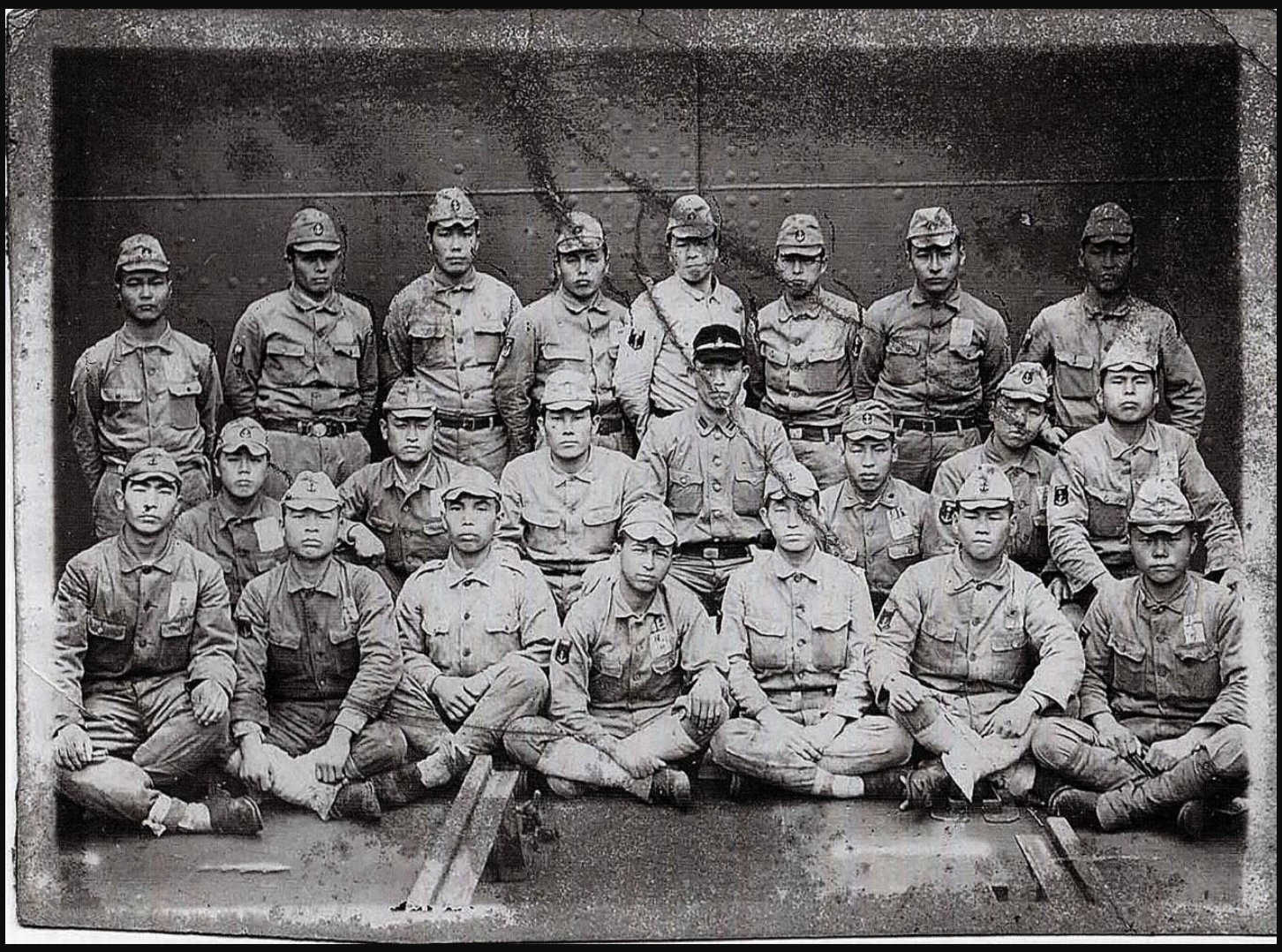
343. SENIOR COMMAND STAFF ABOARD YAMATO, JAN OR APRIL 1945

Note the open mount 25mm AA gun behind the group. Also visible just behind the group is the splinter protection decagonal shield erected half way around the AA position, with the border edges painted white. On the left you can see one of the turret protected 25mm AA positions. Photo courtesy of Christian van der Sanden.

344. YAMATO MEDICAL CENTER PERSONNEL POSE INSIDE THE WELL OF THE AIRCRAFT HANGAR, JANUARY 1945.
Note the rails for the aircraft dolly mount, and the shadow of the crane arm above them. Photo courtesy of Christian van der Sanden.

345. PROMOTION CEREMONY IN YAMATO'S AIRCRAFT HANGAR WELL, 1945
Photo courtesy of Christian van der Sanden.

346. STUDENT REVERVISTS FROM THE 4-TH YEAR NAVIGATION COURSE IN YAMATO'S AIRCRAFT HANGAR, 1945
Photo courtesy of Christian van der Sanden.



347. GROUP OF 25MM MACHINE GUN PERSONNEL IN THE WELL OF YAMATO'S AIRCRAFT HANGAR - 1945
Photo courtesy of Christian van der Sanden. He writes: *"This is the complete crew of the 12th machine gun group."*

348. OFFICERS OF THE FIRST WARD ROOM – YAMATO, JANUARY 1945
Photo courtesy of Christian van der Sanden.

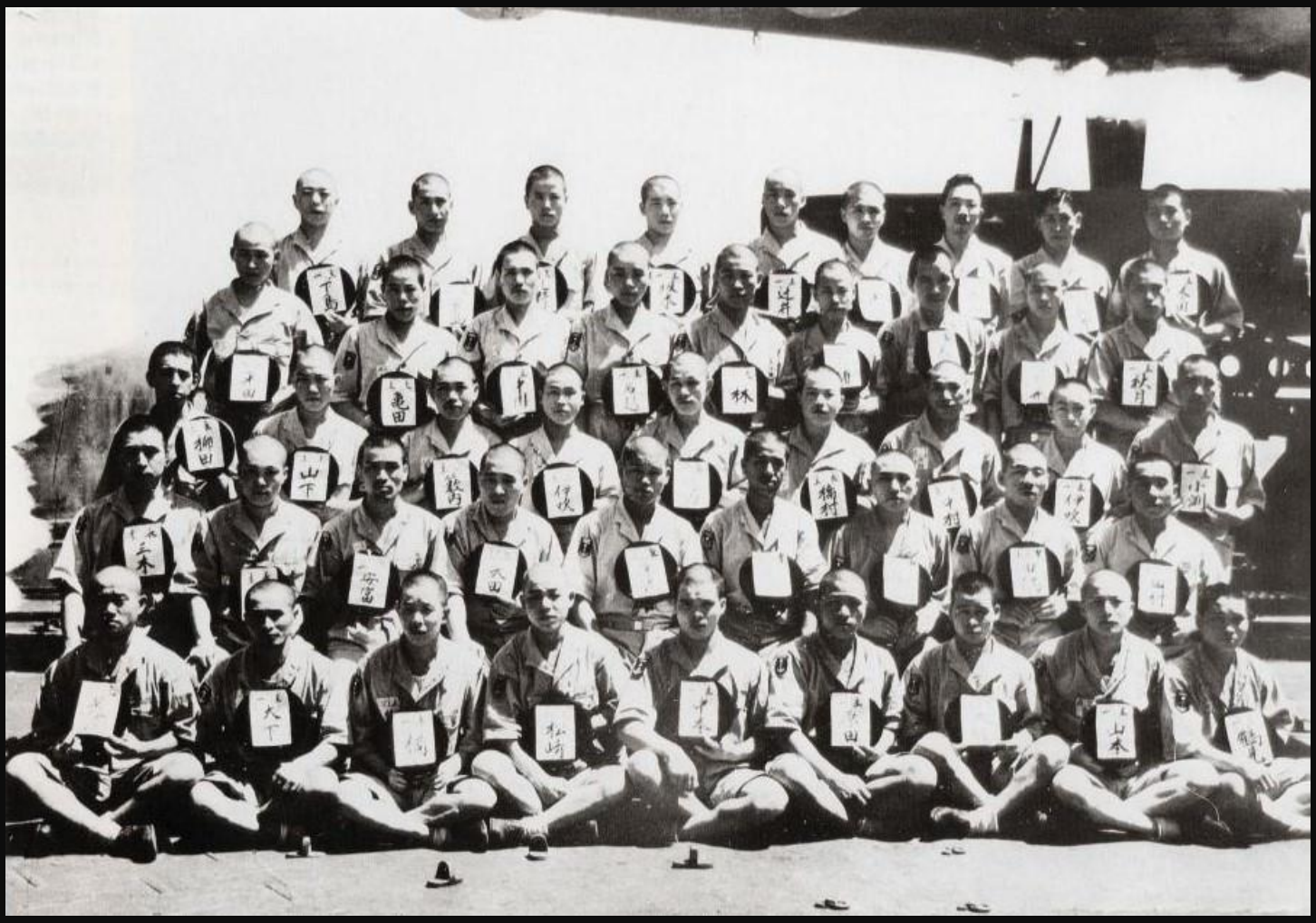
349 OFFICERS OF THE SECOND WARD ROOM – YAMATO, JANUARY 1945
Photo courtesy of Christian van der Sanden.

350. OFFICERS OF THE WARRANT WARD ROOM – YAMATO, JANUARY 1945
Photo courtesy of Christian van der Sanden.

351. YAMATO CREWMEN BEHIND THE BARBETTE OF MAIN TURRET #2 ON THE STARBOARD SIDE, DEC. 1944
Photo courtesy of Christian van der Sanden.

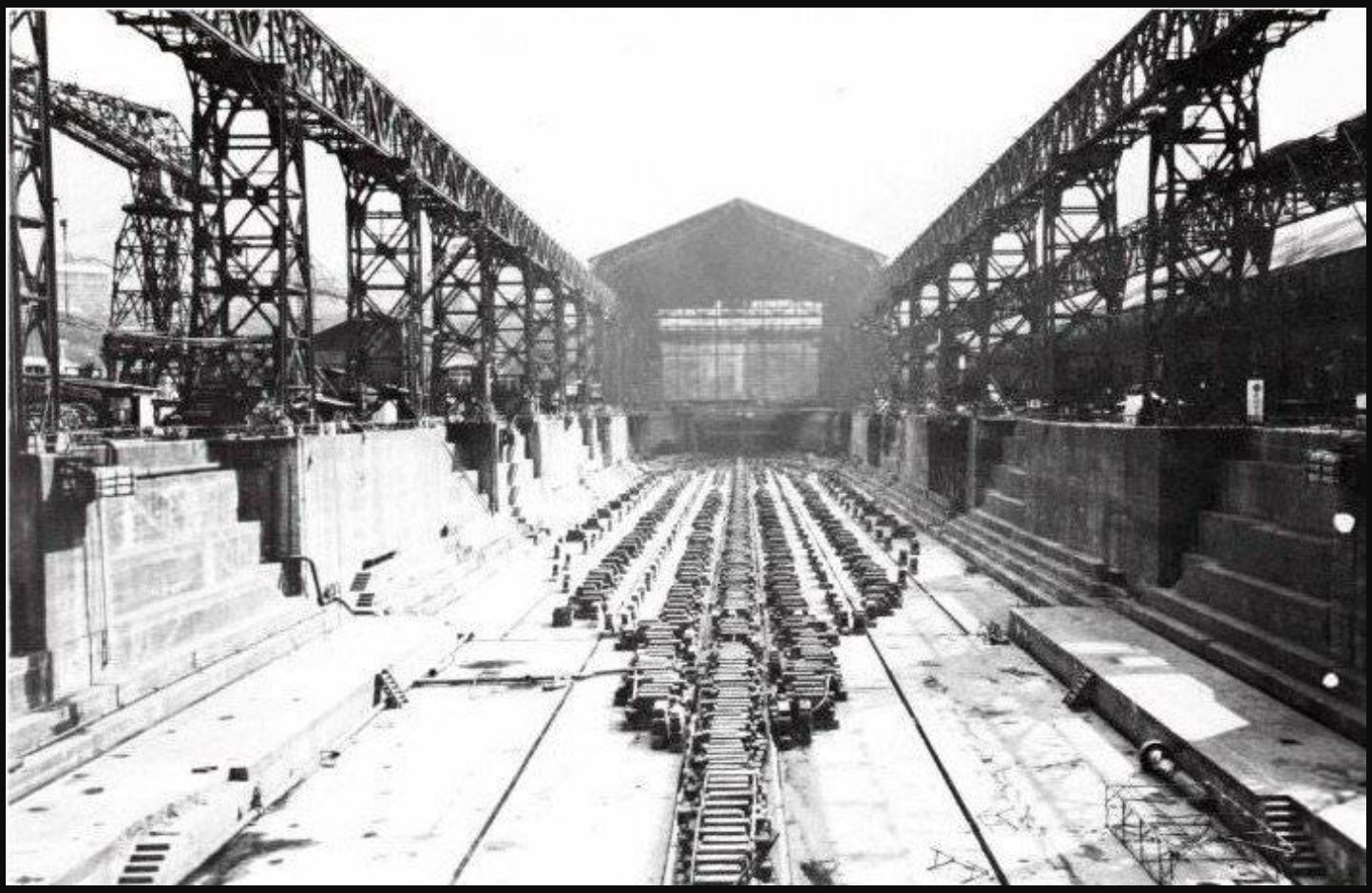
Anthony Tully adds context to the time frame of this photo: *"Yamato had just returned home damaged from Borneo and the Leyte Gulf battles. The battleship KONGO was torpedoed and sunk in front of her on the way to Japan."*

352. YAMATO CREWMEN POSING ON THE AIRCRAFT DECK, SOME TIME AFTER HER BIG REFIT IN 1944.
Note the dolly rails in front of them. Also visible on the R are parts of one of the catapults as well as of the float plane resting on a dolly atop the catapult. Photo courtesy of Christian van der Sanden.



353. YAMATO CREWMEN POSING ON THE AIRCRAFT DECK, SOME TIME AFTER HER BIG REFIT IN 1944.
Visible on the R are parts of one of the catapults as well as of the float plane resting on a dolly atop the catapult behind the men. Photo courtesy of Christian van der Sanden.

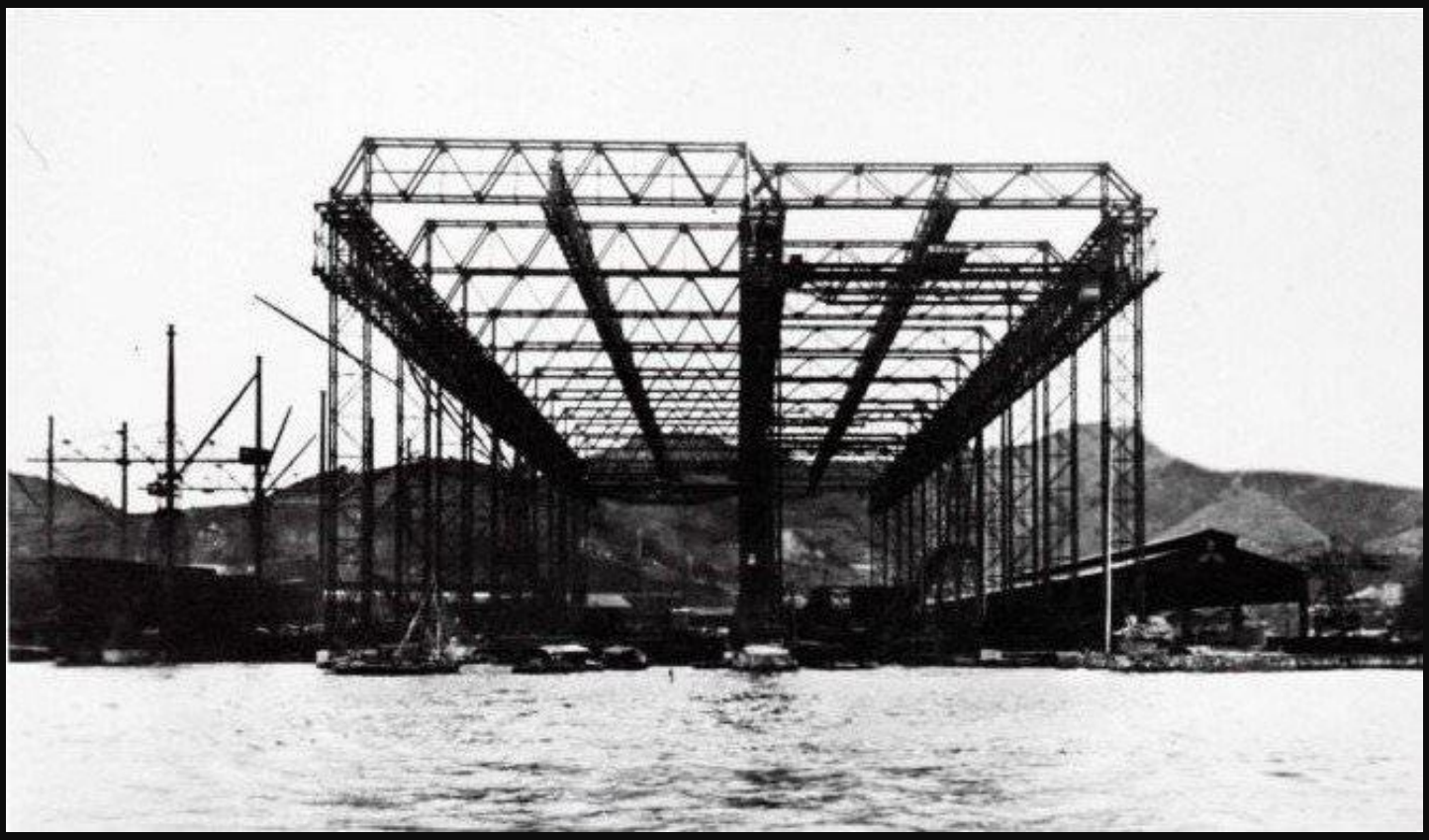
354. YAMATO CREWMEN POSING ON THE AIRCRAFT DECK, SOME TIME AFTER HER BIG REFIT IN 1944.
Visible on the right are parts of one of the catapults as well as of the float plane resting on a dolly atop the catapult behind the men. Photo courtesy of Christian van der Sanden.



355. KURE DRY DOCK NO. 4 WHERE YAMATO WAS BUILT.
Photo courtesy of Christian van der Sanden

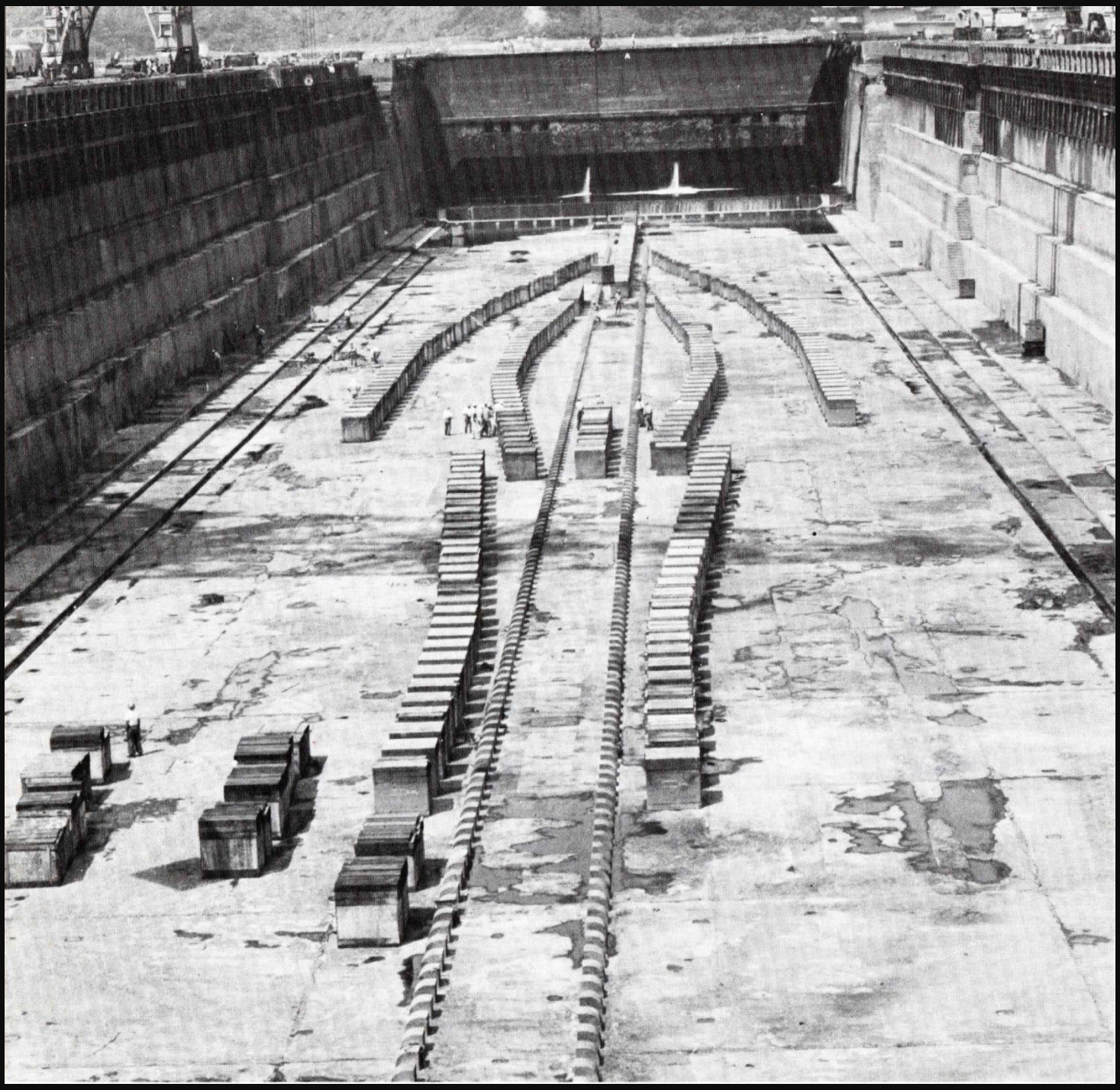
356. ON THE OCCASION OF YAMATO'S LAUNCH, AUGUST 8 1940 - TAKEN AT THE FOOT OF HER LAUNCHING PAD
Photo posted to FB IJN Page by Tachihito Fukui.

He writes: *"Third from the left in the front row is Lt CMDR Makino Shigeru chief designer of Yamato, sixth from left in the front row is RADM Niwada, Director of Shipbuilding Department."*



357. NAGASAKI DRY DOCK NO. 2 WHERE MUSASHI WAS BUILT.
Photo courtesy of Christian van der Sanden

358. PHOTO OF OFFICIALS AT MUSASHI'S LAYING DOWN CEREMONY, MARCH 29, 1938.
Photo courtesy of Christian van der Sanden



359. YOKOSUKA DRY DOCK NO. 6 WHERE SHINANO WAS BUILT.
Photo courtesy of Christian van der Sanden

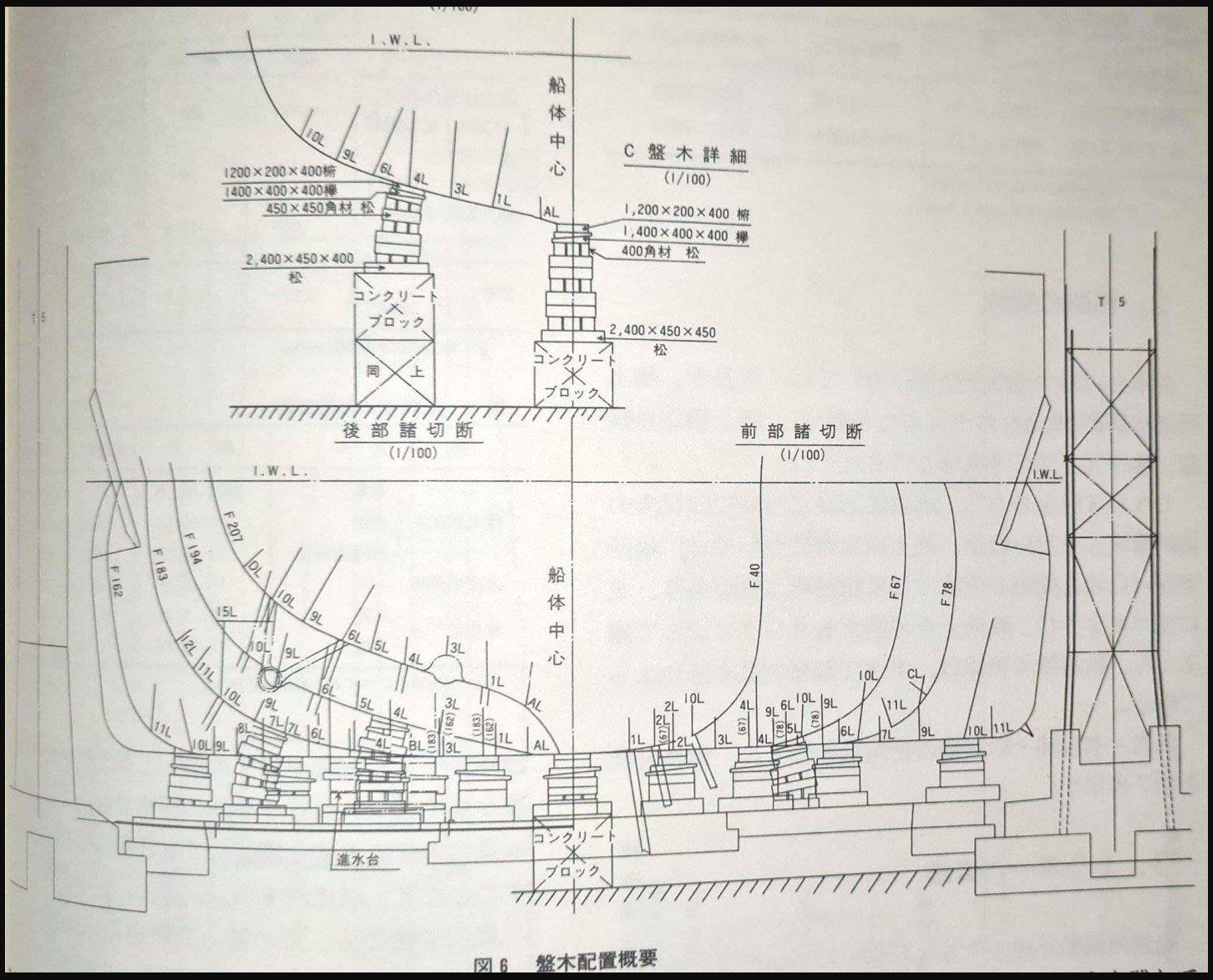


図 6 盤木配置概要

360. DRY DOCK LAYOUT PLAN FOR MUSASHI'S CONSTRUCTION.

Diagram courtesy of Christian van der Sanden

361. The Chrysanthemum crest at Yamato's bow.

362. One of Yamato's great 18.1" main turrets, buried upside down in the sand. The 3 main batteries were torn out of her hull by gravity when the ship capsized and sank to the bottom ahead of her.

363. One of her propeller screws.

364. Side view of the same propeller screw.

365. An unexploded shell lies amidst the debris.

366. More shells strewn about the wreck.

367. The remains of one of Yamato's AA .25mm machine guns that took 4 men to operate.

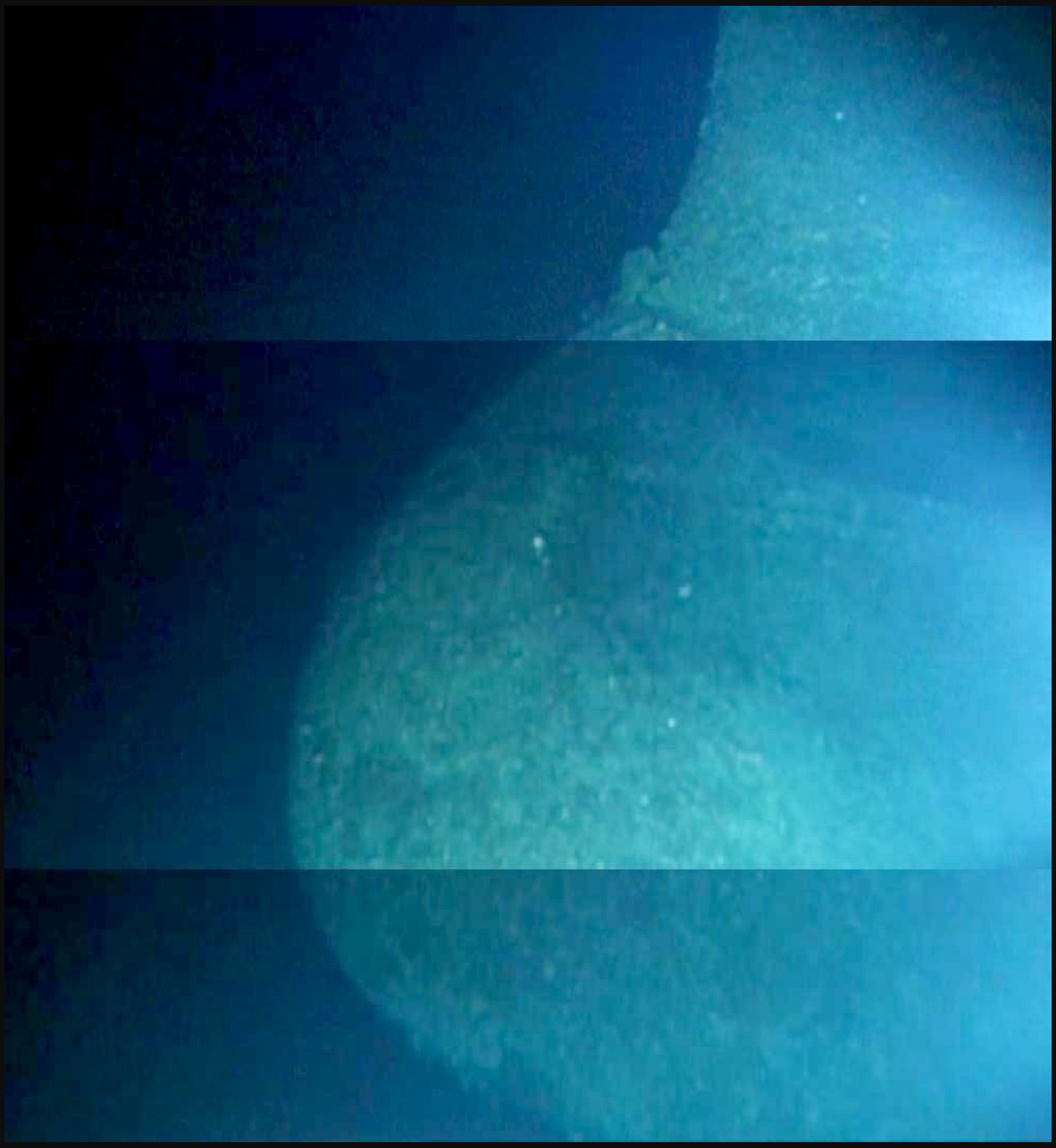
368. Bottles – perhaps from the ship's mess. Did they originally contain sake?

369. Up top on the deck, two giant posts for the ropes securing the ship when she was docked.

370. One of the ship's bugles lies, forever silent, amidst the decaying metal debris.

371. The first look at Yamato's famous "bulbous bow" that was ahead of its time – it reduced the ship's drag by something like 4 or 5% according to her engineers. This feature is now standard in all large oceangoing vessels.

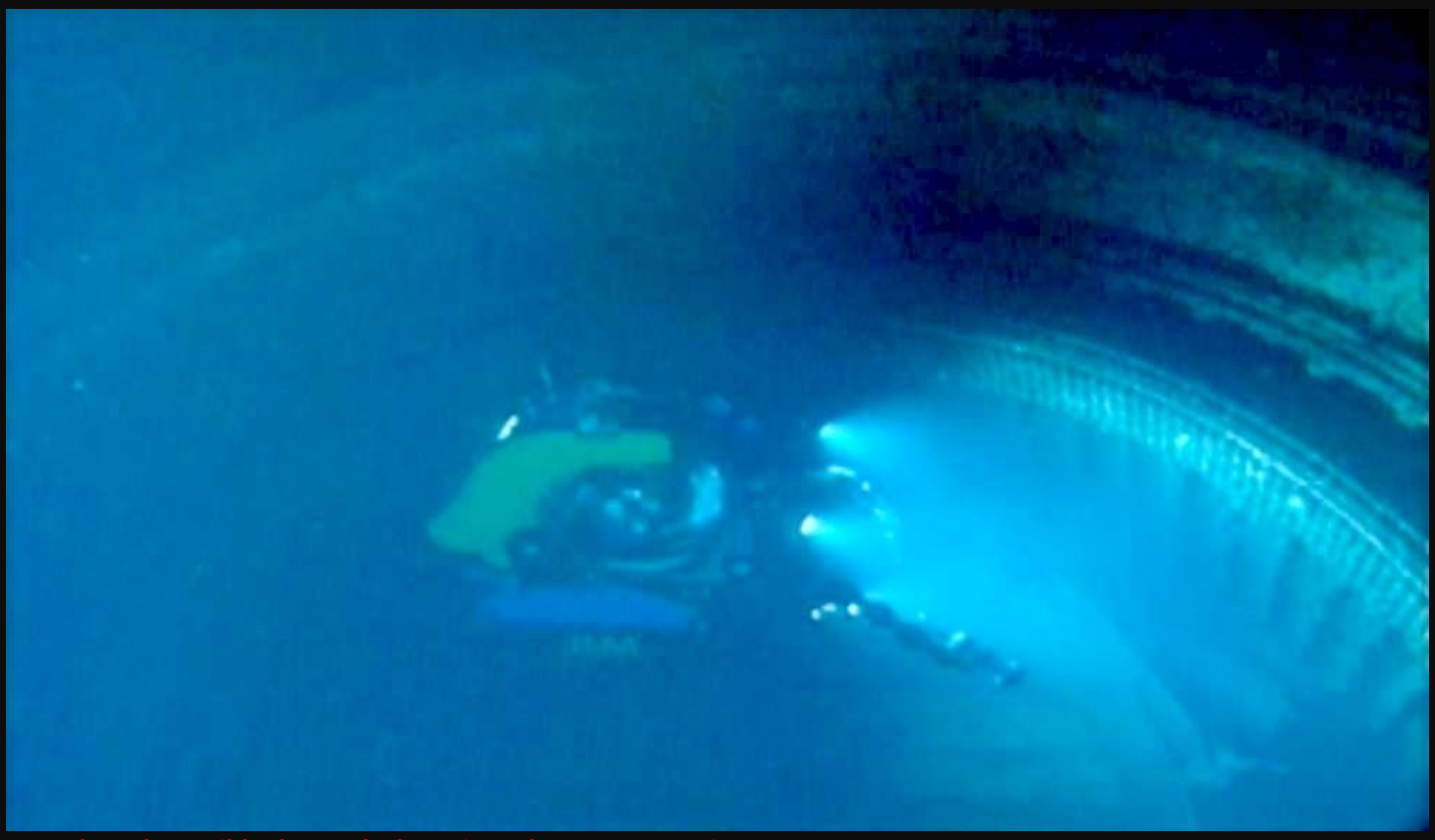
372. The submersible's floodlights illuminate the silhouette of the bow.



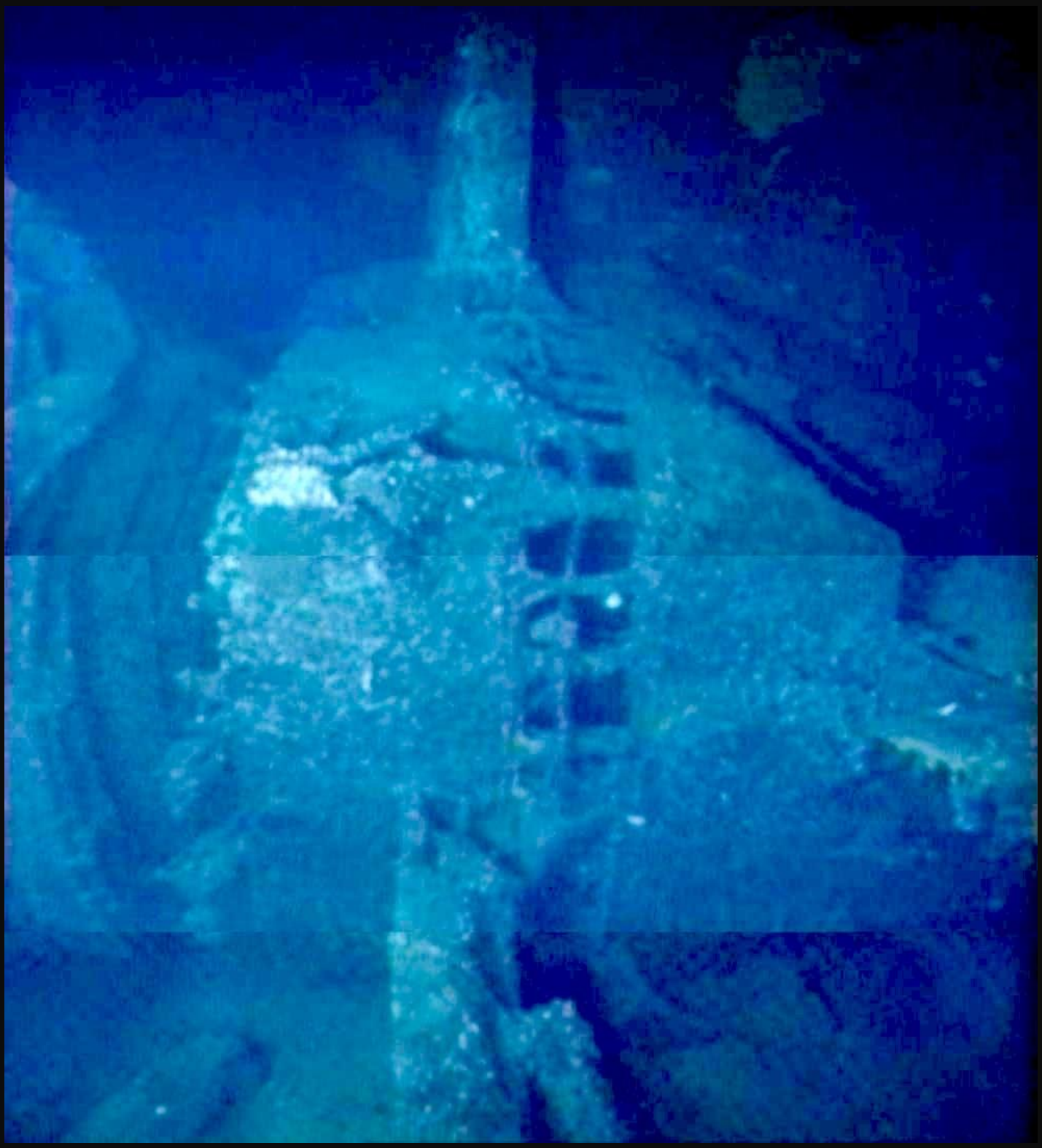
373. A composite photograph I created from three screengrabs of a panning camera show the entire bow.

374. The entire bow is visible in this photo provided by Anthony Tully.

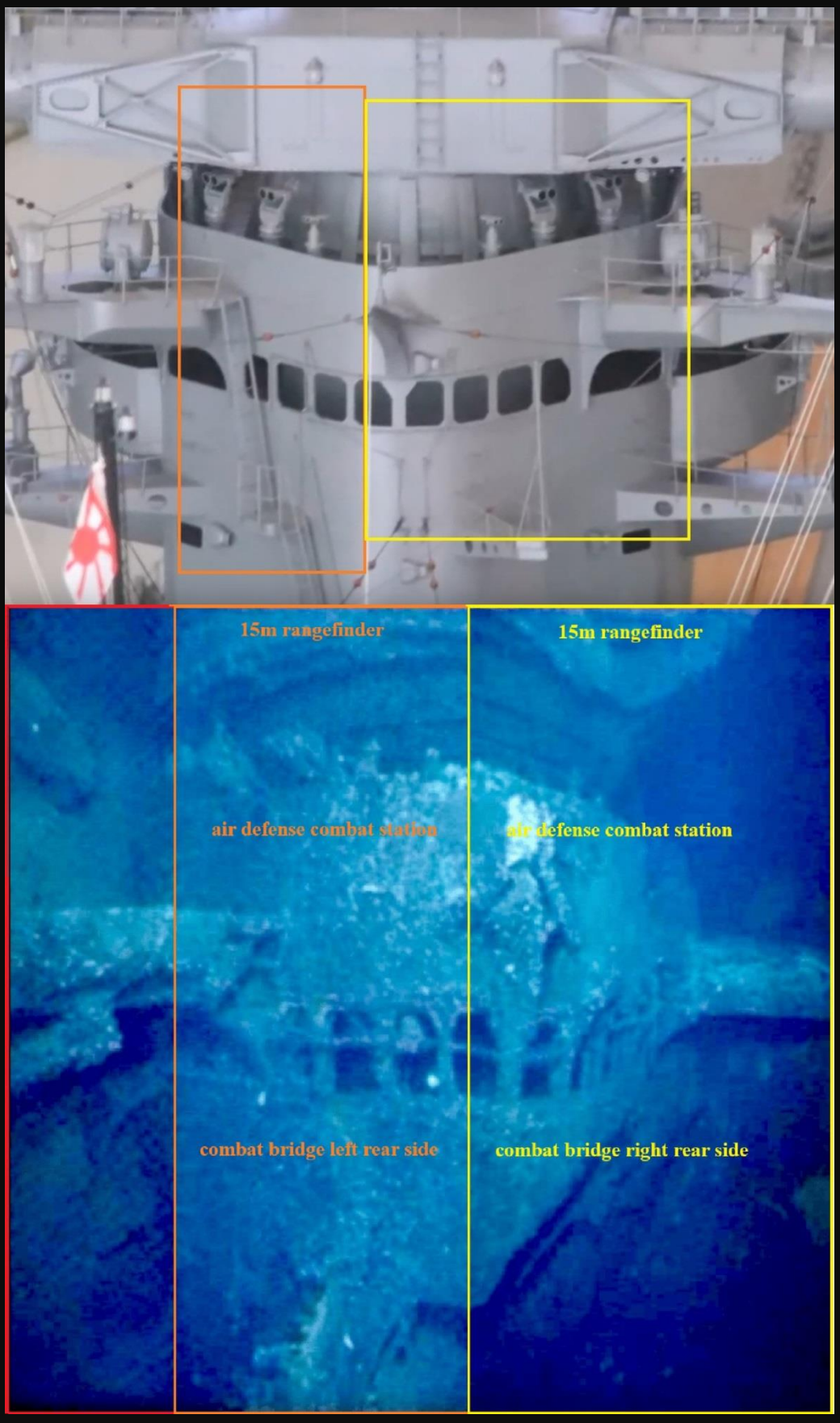
375. Like a gaping maw, the opening where Yamato's #1 main turret was once secured swallows the submersible.



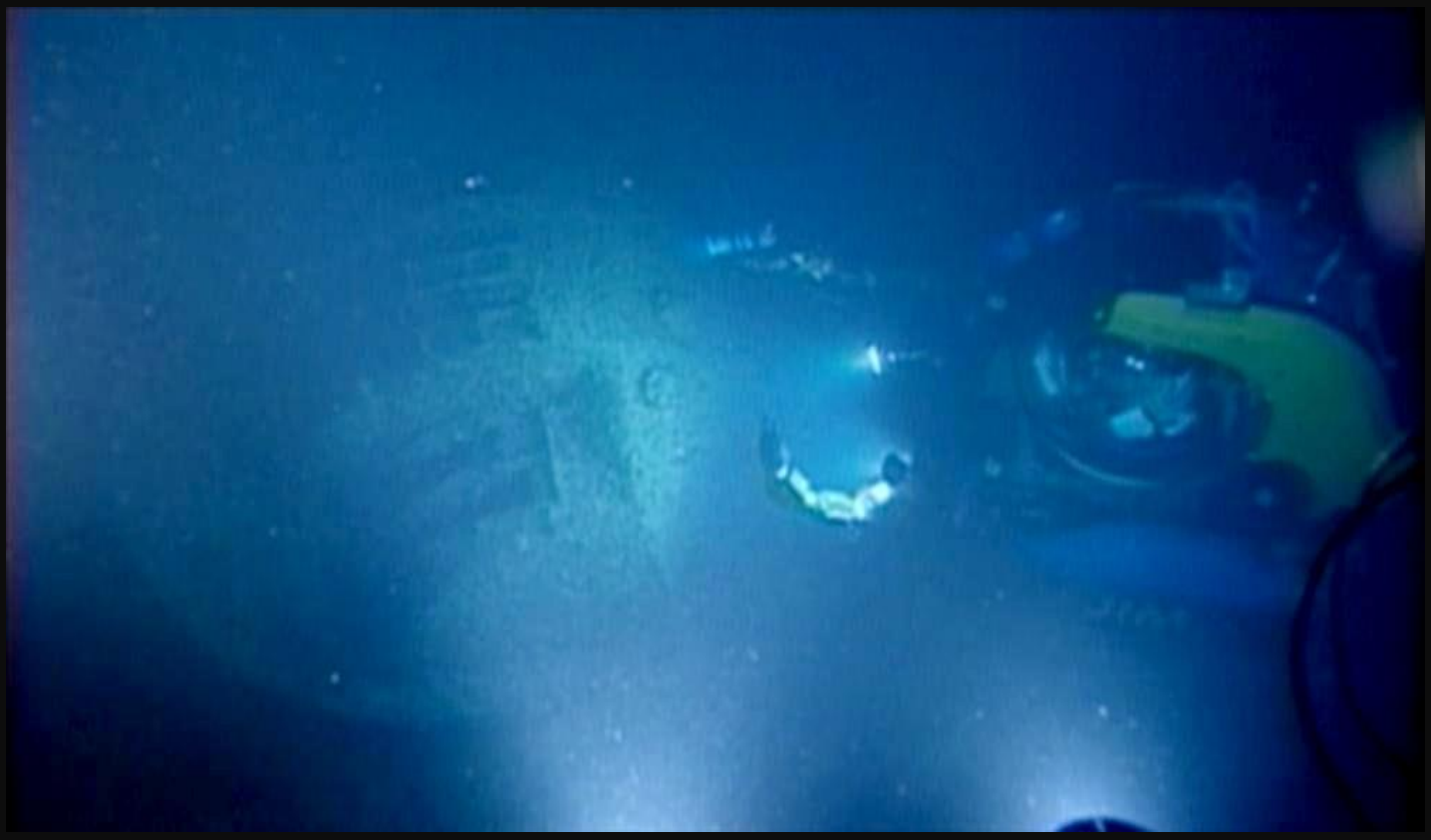
376. The submersible descends down into the empty opening.



377. Another composite photo shows what appears to be one of Yamato's bridges, or a part of the destroyed superstructure, laying on its side on the bottom.



378. This comparison diagram by Christian Van Der Sanden identifies this as the rear side of the main bridge, mangled and missing some pieces. The image is distorted as it is pieced together from moving camera scans.



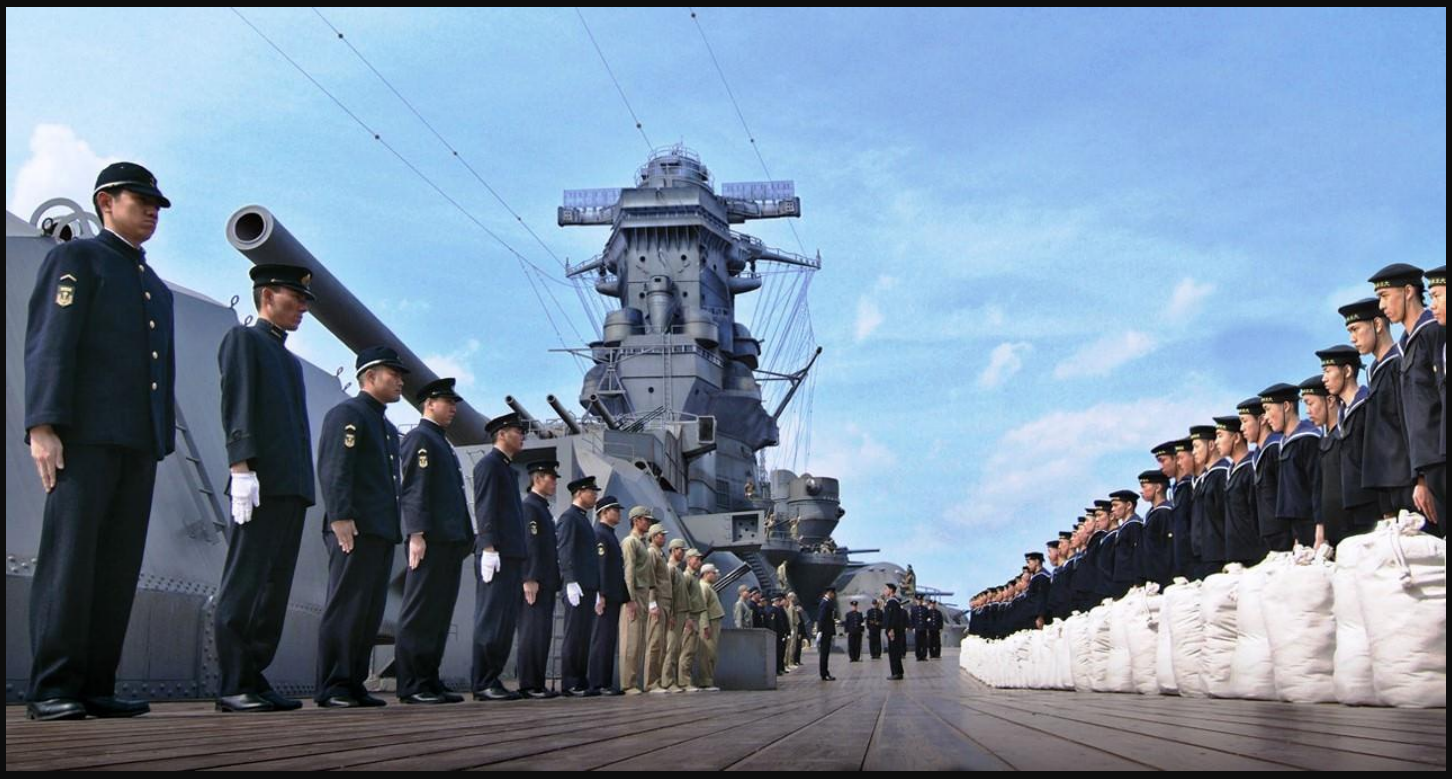
379. One of Yamato's 5" AA battery turrets comes into view.

380. One of Yamato's two secondary 6" batteries lies upside down on the ocean bottom.

381. Another view of one of Yamato's two secondary 6" batteries in its watery grave.

382. The antenna mast still sticks out at a 90-degree angle from the deck at the very tip of the great battleships' bow.

383. A giant gouge showing how the ship's steel hull was torn apart like so much paper by the detonation of her magazines.



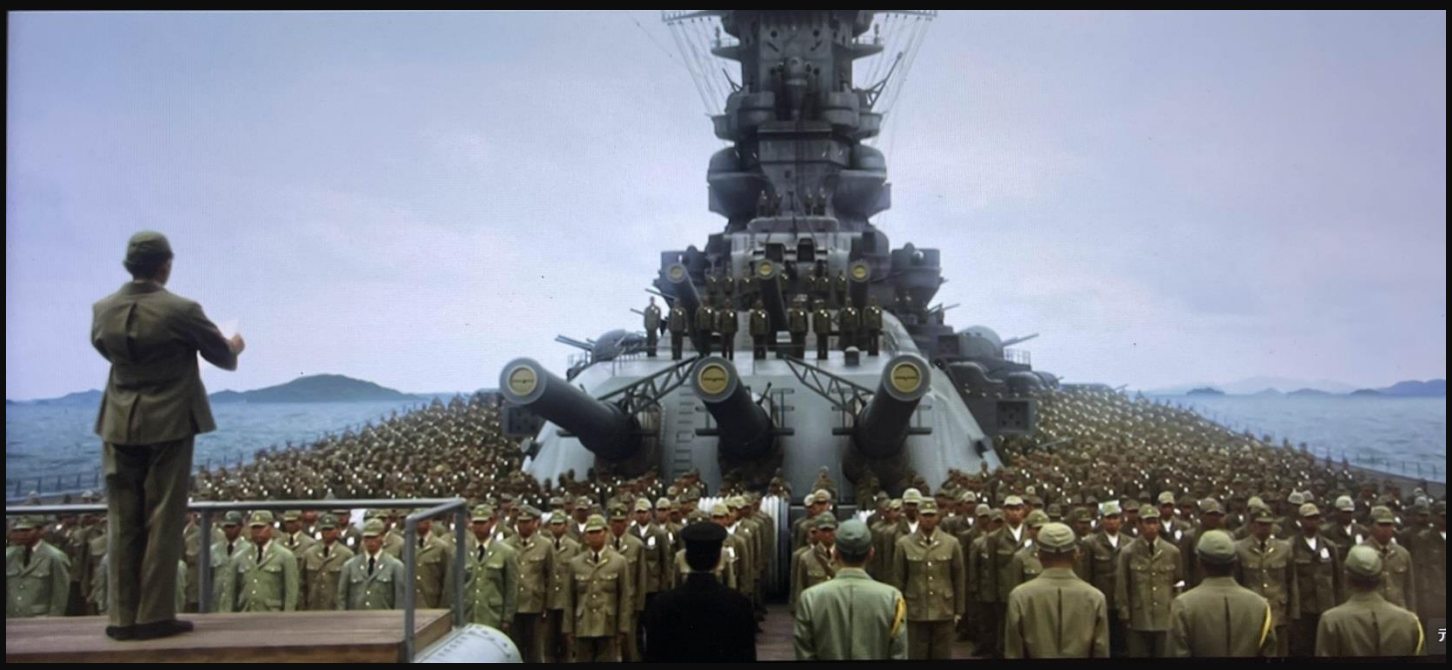
384. "MEN OF YAMATO" (2005)

The first of several recent films to recreate Yamato via CGI was 2005's "Men of Yamato", a fictional story centering around a group of enlisted crew members aboard for her final suicide mission.

385. "MEN OF YAMATO" (2005)

This film combined practical effects with CGI. For example, in the above scene, main turret #1 (but not her barrels), the complete main Turret #2 with her barrels, the secondary battery above it, and the superstructure all the way up to the first bridge just above the secondary was part of a giant set mock-up that was built of Yamato's top decks. The upper part of the superstructure, aft gun batteries, as well as the barrels on turret #1 were superimposed using CGI. Given the austere budget of Japanese films, the combination achieved an impressive effect for 2005.

386. “MEN OF YAMATO” (2005)
Superstructure scene combining CGI and practically built sets. Photo pieced together from screen grabs of panning camera shot.



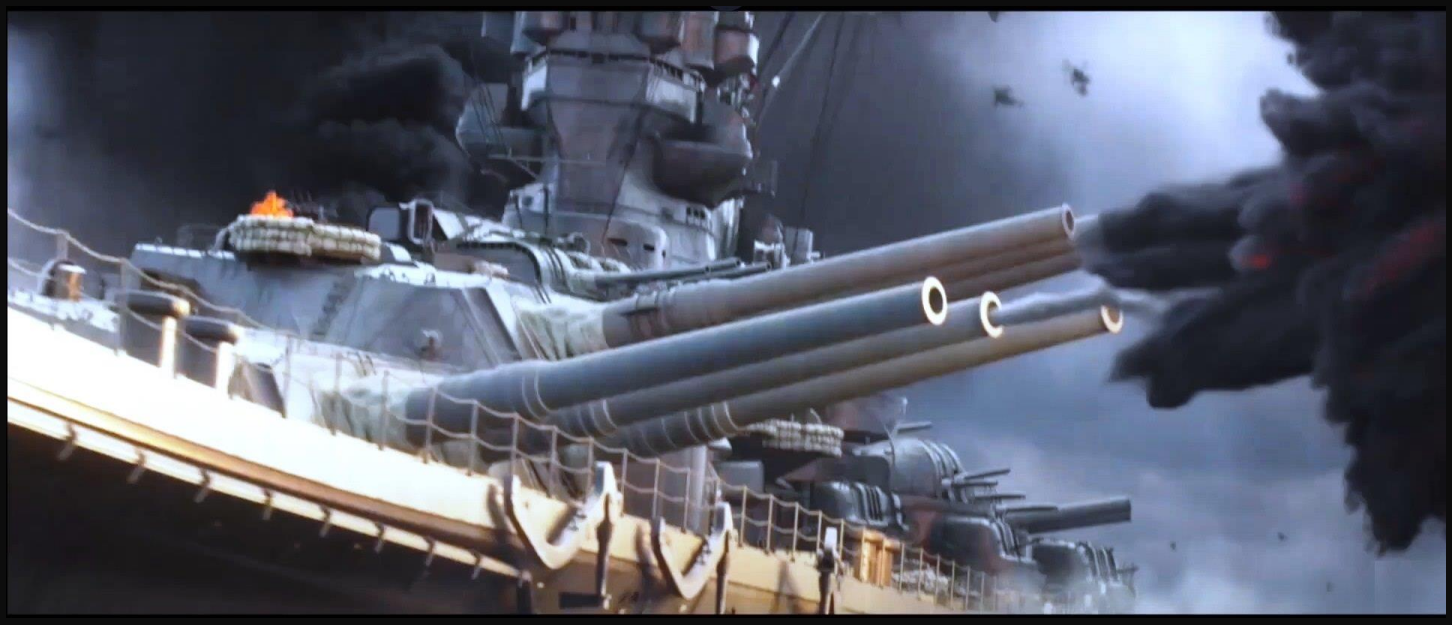
387. "MEN OF YAMATO" (2005)
Once again, the combination of a large practical set with CGI effects created impressive deck top scenes like this one.

388. "THE GREAT WAR OF ARCHIMEDES" (2019)
This film revolves around a fictional story of controversy surrounding the planning and construction of Yamato. As a bonus, there was a 5 minute combat sequence depicting the end of Yamato. Advanced CGI effects enhanced what was an austere budget to create some jarring sequences, some of which are pictured below.

389. "THE GREAT WAR OF ARCHIMEDES" (2019)
Yamato depicted just after her launch in 1941 (note the side deck extra 6" turrets).

390. "THE GREAT WAR OF ARCHIMEDES" (2019)
Crewmembers assembled to greet an arriving Admiral.

391. "THE GREAT WAR OF ARCHIMEDES" (2019)
Crewmembers assembled to greet an arriving Admiral.



392. "THE GREAT WAR OF ARCHIMEDES" (2019)
Depiction of Yamato opening fire at approaching planes with "Beehive" AA shells.

393. “THE GREAT WAR OF ARCHIMEDES” (2019)
Dive bomber sequence

394. “THE GREAT WAR OF ARCHIMEDES” (2019)
Dive bomber sequence

395. “THE GREAT WAR OF ARCHIMEDES” (2019)
Dive bomber sequence

396. “THE GREAT WAR OF ARCHIMEDES” (2019)
Dive bomber sequence

397. “THE GREAT WAR OF ARCHIMEDES” (2019)
Strafing Sequence

398. “THE GREAT WAR OF ARCHIMEDES” (2019)
Strafing Sequence

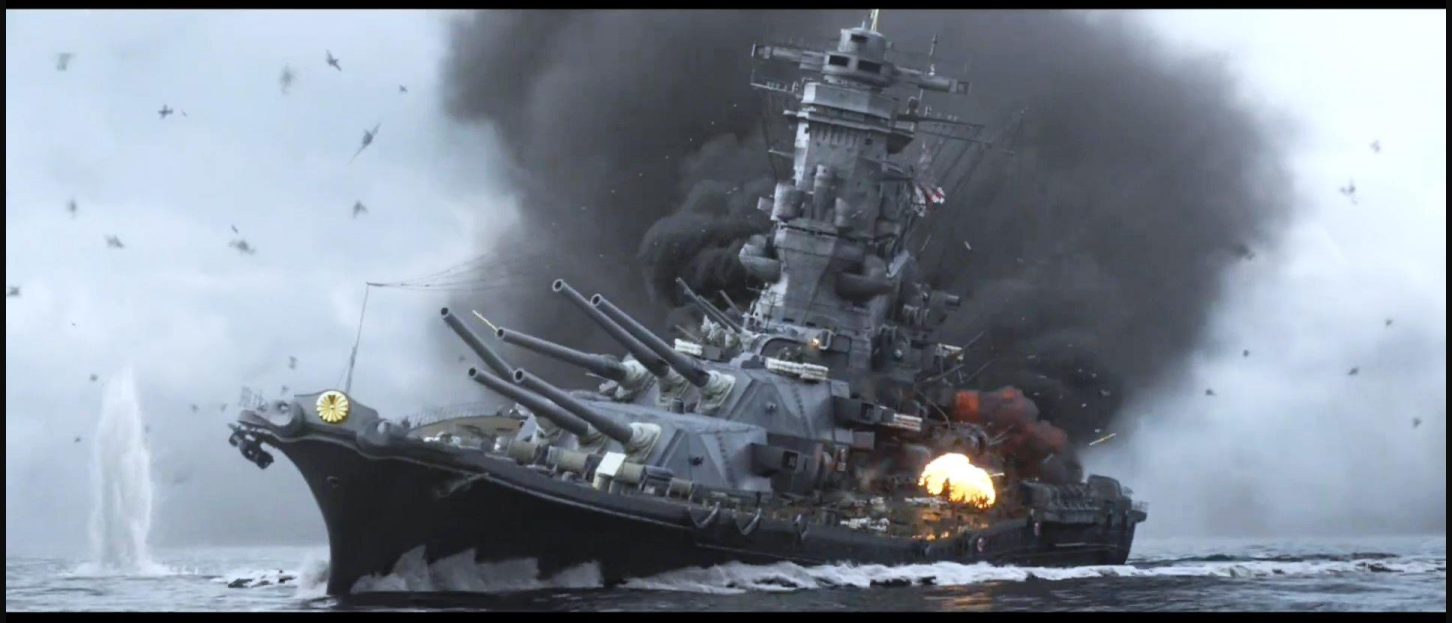
399. “THE GREAT WAR OF ARCHIMEDES” (2019)
Strafing Sequence

400. “THE GREAT WAR OF ARCHIMEDES” (2019)
Torpedo Drop Sequence

401. “THE GREAT WAR OF ARCHIMEDES” (2019)
Torpedo Drop Sequence

402. “THE GREAT WAR OF ARCHIMEDES” (2019)
Torpedo Drop Sequence

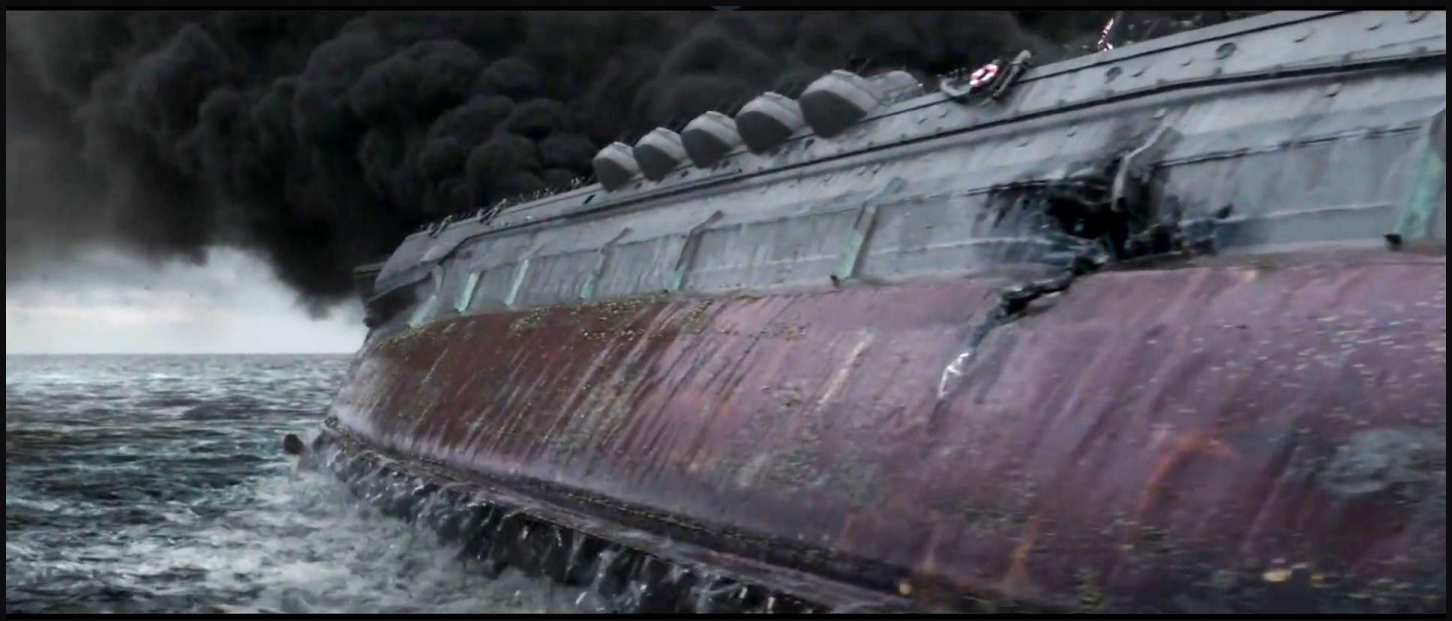
403. “THE GREAT WAR OF ARCHIMEDES” (2019)
Torpedo Drop Sequence



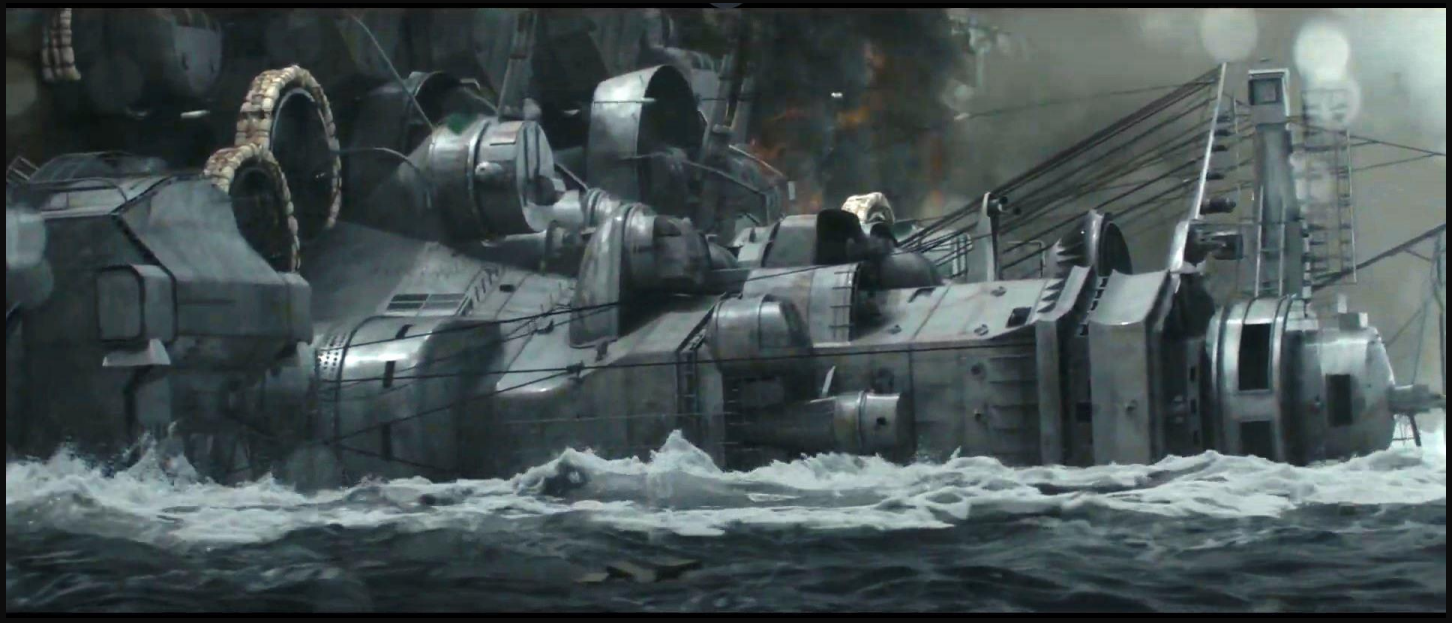
404. “THE GREAT WAR OF ARCHIMEDES” (2019)
The End of Yamato Sequence

405. "THE GREAT WAR OF ARCHIMEDES" (2019)
The End of Yamato Sequence

406. "THE GREAT WAR OF ARCHIMEDES" (2019)
The End of Yamato Sequence



407. “THE GREAT WAR OF ARCHIMEDES” (2019)
The End of Yamato Sequence

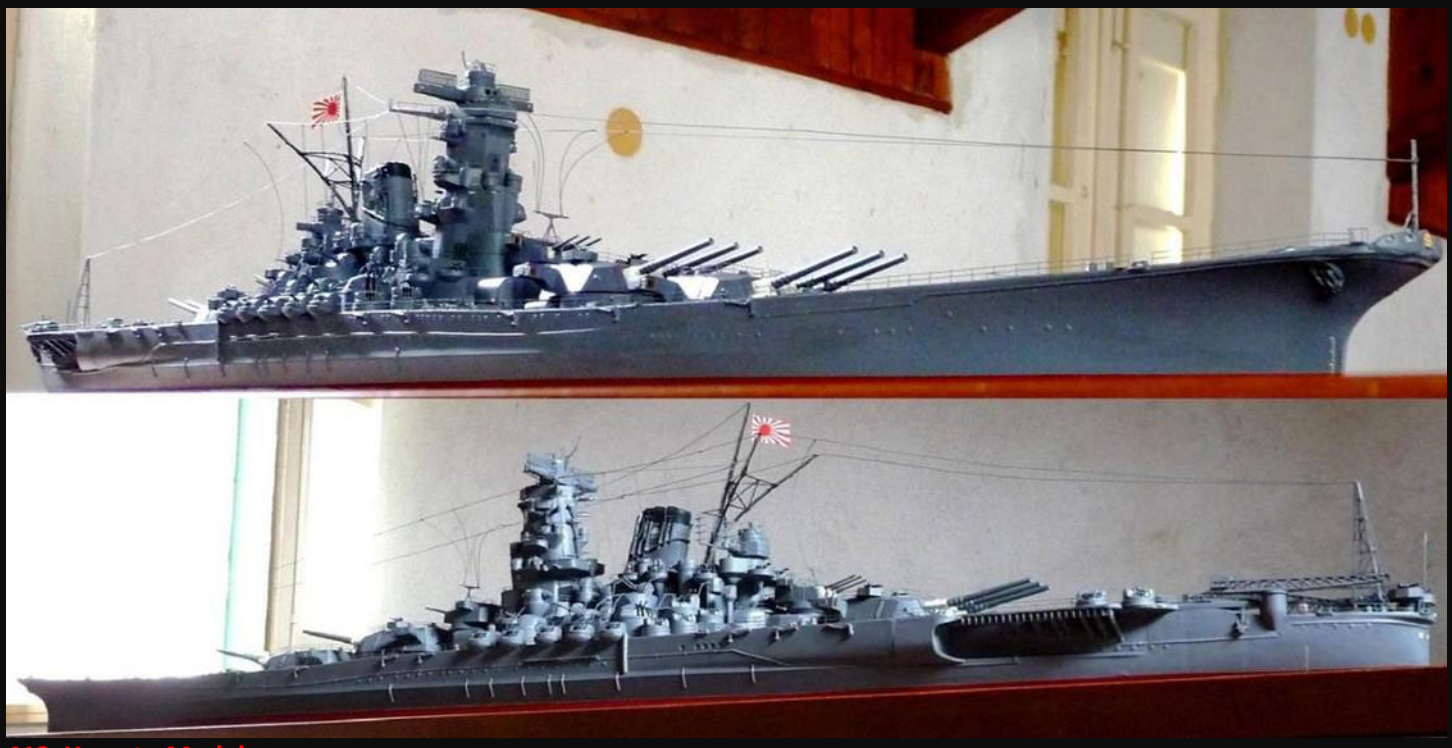


408. “THE GREAT WAR OF ARCHIMEDES” (2019)
The End of Yamato Sequence

409. “THE GREAT WAR OF ARCHIMEDES” (2019)
The End of Yamato Sequence

410. “THE GREAT WAR OF ARCHIMEDES” (2019)
The End of Yamato Sequence

411. Yamato Model - Display box with singed metal IJN flag on the wall and larger 1/144 models alongside.



412. Yamato Model

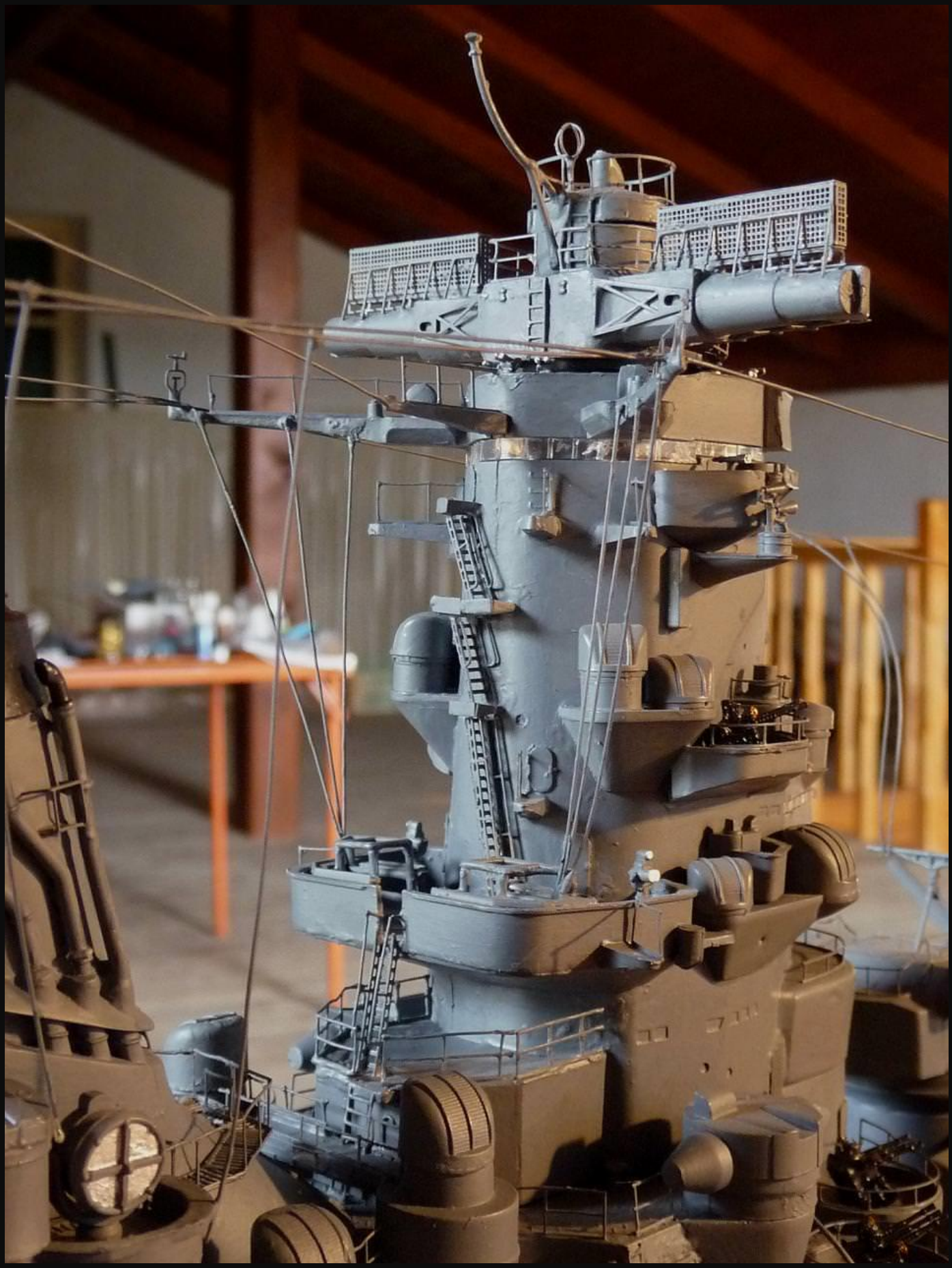
Waterline “below-the-display-table” shots. All ships just look so much better to me this way.

413. Yamato Model – Note that the main 3 turrets are aftermarket from Konishi Models and are solid metal.

414. Yamato Model – Profile shot.

415. Yamato Model – Portside front deck view

416. Rear aircraft light deck – (I got the shape of the two AA buckets at the stern correct even though the usual reconstructions at the time made them look like squares. The most recent wreck research confirms the configuration you see here with octagonal boxes.)



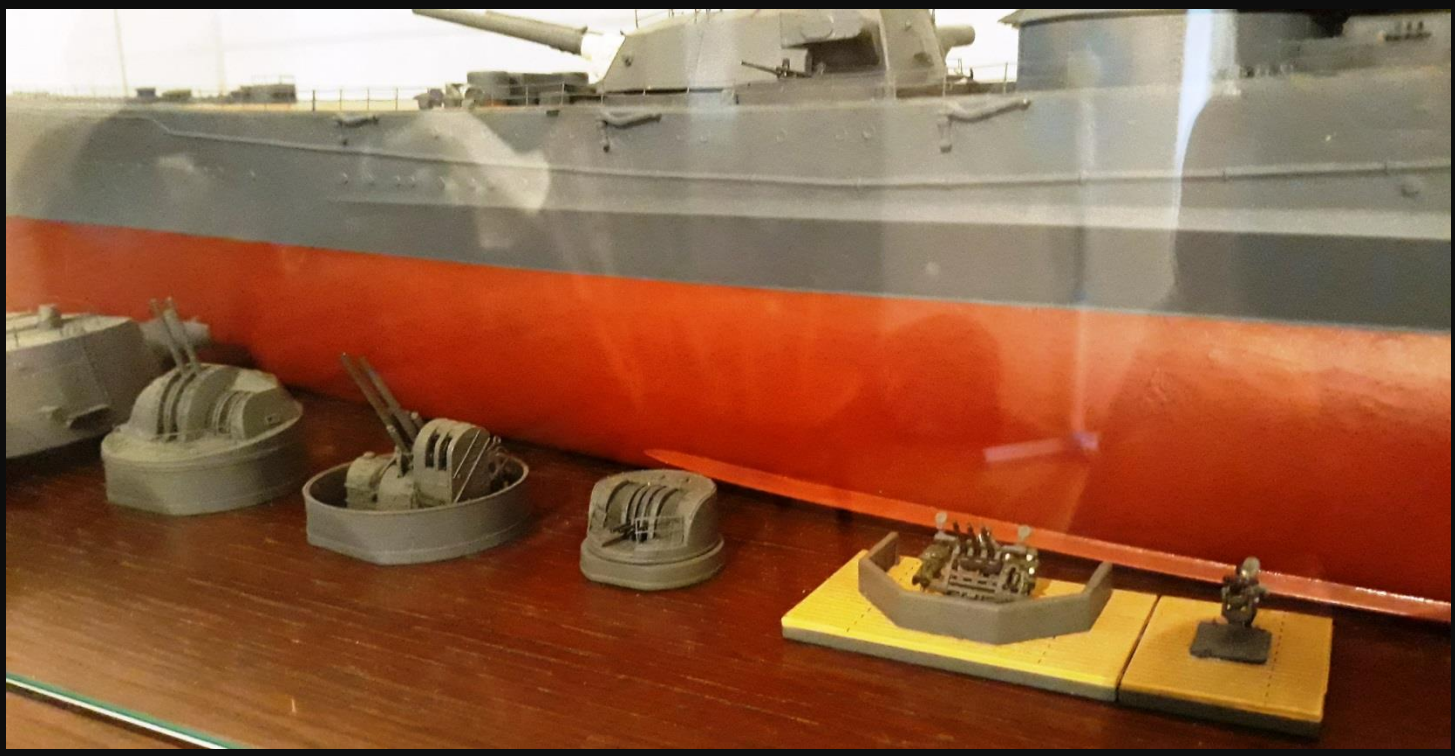
417. Yamato Model – Rear of superstructure.

418. Yamato Model

Starboard view amidships. I have to confess to one oversight – the third (lower) search light – 1 on each side – was not removed prior to Ten-ichigo for an extra fire control director, as Christian Van Der Sanden dutifully pointed out to me using the April 7 1945 combat photo of Yamato that shows all 3 searchlights still in place. That added fire control director (again, 1 on each side) was added just under the front tower, just above the open 5" AA gun. So I made the correct number of directors, but I mislocated one. (Just check the diagrams section if this is too confusing).

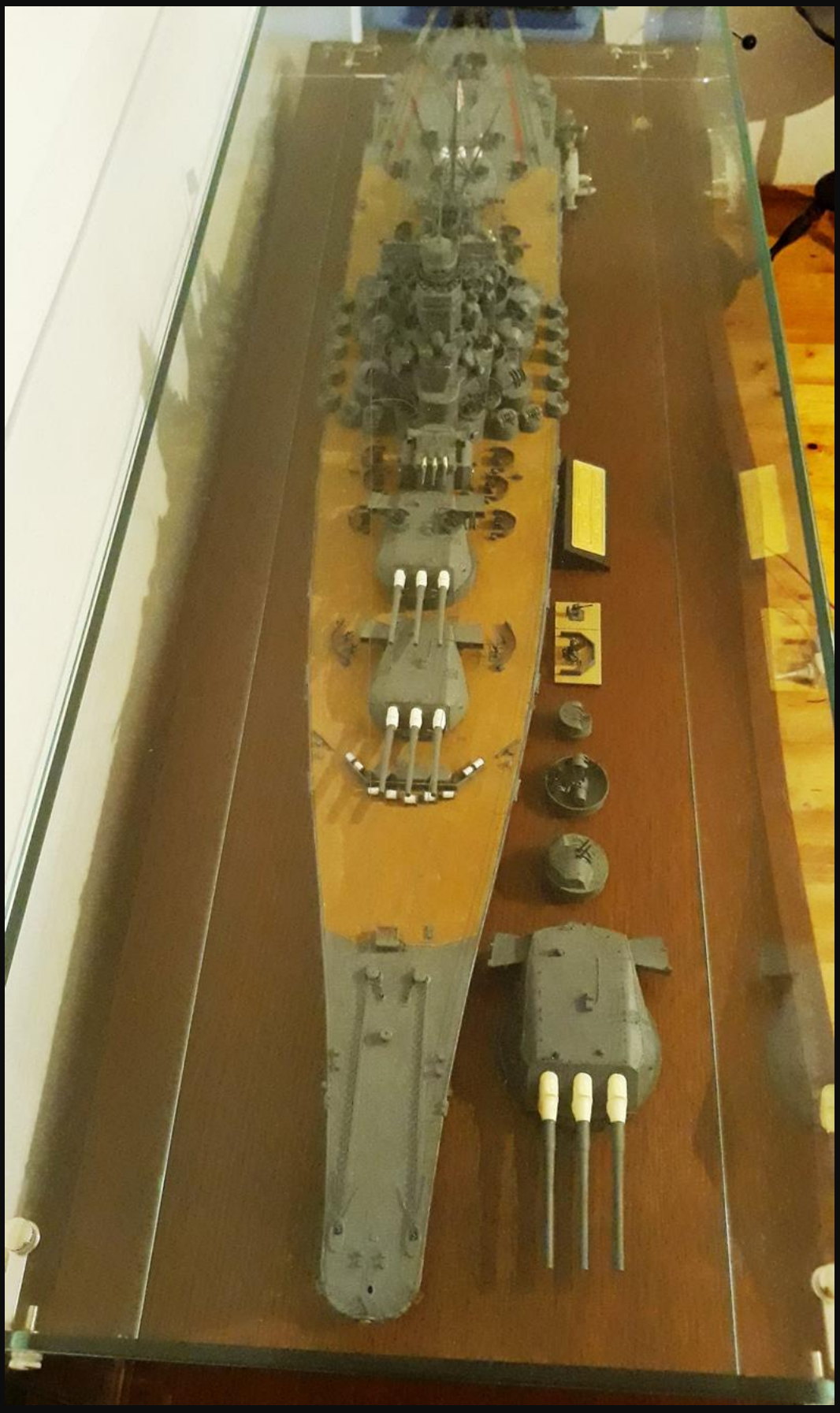
419. Yamato Model
Port side amidships view.

420. Yamato Model
Front of superstructure giving a closer look at the shielded deck-mounted .25 mm AA guns.



421. Yamato Model
1:144 scale Pitt-Road models of Yamato's 5" and 25cm AA guns in their various configurations. Crewmembers are visible if you zoom in.

422. Yamato Model
1:144 scale Pitt-Road 18.1" (465cm) turret model – note the crewmber standing on top.



423. Yamato Model

Aerial view, with larger 1:144 scale Pitt-Road models displayed alongside.

424. Yamato Model

Head-on view, with larger 1:144 scale Pitt-Road models of her guns displayed alongside.

425. Yamato Model

Rear View with larger 1:144 scale Pitt-Road models of her floatplanes displayed alongside.

426. Yamato Model

1:144 scale Pitt-Road models of the two types of Yamato short and long range reconnaissance float planes – the Mitsubishi F1M “Pete” biplane, and the Aichi E13A “Jake” low-wing monoplane with crew of three.